Program & Abstracts

The 5th Scientific Meeting of the Japan–Hungarian Surgical Society

Symposium Commemorating Kiss, Regöly-Mérei, Ohgami, Otani

4 – 6 October, 2012

Venue of the Symposium:
Zichy Géza utca (street) 3.
Budapest, Hungary

“Lessons of the Past direct us to the Future”
Greetings for the Fifth Scientific Meeting

Dear colleagues and friends,

It was 16 years ago when-by the organization of Professor Renzo Hirayama – a series of Hungarian scientific studies was published in the Japanese surgical journal, Surgery Today. The success of these papers resulted that Professor Masaki Kitajima and me have shaken hands and founded and organized a new association, the Japan-Hungarian Surgical Society.

As it was written in the General Rules:

„The purpose of the association is to encourage the progress of medical science in Japan and in Hungary, to contribute to the welfare of people of both nations. The purpose is realized by promoting scientific exchange between Japan and Hungary concerning surgery and cementing friendly relationship between the doctors in both countries."

Our common society organized four scientific meetings until now: the first (Pólya-Herczel symposium) and the third (Berci-Veress Symposium) were held in Budapest, while at the second one (Kitasato-Hanaoka Symposium) in Tokyo and at the fourth one in Yokohama (Matsuyama-Balassa Symposium) we have enjoyed Professor Kitajima’s wonderful leadership and hospitality. This year again Budapest is the host city. The number of Japanese and Hungarian presentations is larger than at any other previous common meetings and represent a wide variety of topics. Beside the professors, chief surgeons of international reputation, talented young surgeons and residents of both nations also have opportunity to demonstrate their studies in the magnificent Stefania Palace.

During the past years we have lost excellent Hungarian and Japanese colleagues. They passed away in their full activity age. János Kiss, János Regöly-Mérei, Masahiro Ohgami, Yoshihide Otani were active participants of our common meetings from the beginning of the foundation of the society. That’s why this year the name of our scientific meeting is Symposium commemorating Kiss, Regöly, Ohgami, Otani and our slogan is Lessons of the Past direct us to the Future.

I have to say many thanks to our supporters, to the members of the Organizing Committees in Hungary and in Japan. I am convinced the 5th Scientific Meeting of our common society will result in a considerable success. Enjoy the beauty of Budapest, have a nice stay in Hungary.

Prof. József Sándor, MD, PhD., F.A.C.S.
Semmelweis University, Budapest
Founding Co-President of the
Japan–Hungarian Surgical Society
Dear Colleagues,

It is my great pleasure to have the 5th Scientific Meeting of the Japan-Hungary Surgical Society Meeting in Budapest, Hungary. It has past twelve years since the First Scientific Meeting of the Japan-Hungary Surgical Society was held in Budapest, Hungary in September 2001 under wonderful leadership of Professor Jozsef Sandor. After its success, we have deepened scientific exchanges and warm friendship between Japanese and Hungarian surgeons through the second and fourth meeting held in Tokyo, Japan and third meeting in Budapest, Hungary in 2008. Through this Society, we sincerely hope that surgeons and researchers from both countries will have the opportunity to deepen their relationship and acquire more information, and they convey the advanced and effective findings from their researches in surgery.

We are very much confident that you will have a wonderful and memorable time with inspiring scientific programs and warm friendship.

I would like to offer my sincere appreciation for your generous support and cooperation.

Masaki Kitajima, M.D., F.A.C.S (hon), F.R.C.S (hon), A.S.A(hon)
Founding Co-President of the Japan-Hungary Surgical Society
President of International University of Health and Welfare
Tokyo, Japan
JÁNOS KISS (1941–2010)

Professor János Kiss, the outstanding Hungarian esophageal surgeon and the foundation member of the Japanese-Hungarian Surgical Society, is mourned by the Hungarian Society of Surgeons, the Japanese-Hungarian Surgical Society, the ISDE and the European Surgical Association. History heavily handled him as it did with so many of his generation in Central Europe. Janos Kiss was born in Galánta in 1941, then Hungary, now Slovakia. His family had to flee their native land in 1946 and move to Budapest, where he grew up in deep poverty. One of his teachers in the secondary school was Dr. József Antall who became the first democratically elected prime minister of Hungary in 1990. Strong will, diligence, and hard work helped him to obtain a residency post in one of the leading surgical clinics in Budapest, headed by Professor Littman, one of the greatest names in surgery behind the Iron Curtain which divided contemporary Europe. Kiss left a promising career in cardiac surgery, as his interest was turned towards the ‘neglected organ in the thorax’ – the esophagus. Having spent an intensive training in Szeged, Hungary under the guidance of József Imre, who had been trained at the Frenchay Hospital in Bristol, UK and had founded the Hungarian school of esophageal surgery, Kiss returned to Budapest. Here he built up a center, the performance of which quickly earned him and his team a European and transatlantic reputation. In 1984 he spent much time at the department of surgery of the Toranomon Hospital, led by Professor Akiyama. Their friendship intensified professional and human relationships between Hungarian and Japanese surgeons. International publications, congress presentations and several short-term professional visits secured him a high rank in the global arena of esophageal and upper gastrointestinal surgery. His remarkable surgical skills, intellectual capacity, and warm, open personality were recognized widely and gave birth to deep friendships with Professor Lerut, Jeyasingham, Skinner, Sewert and Orringer, just to mention those that he has been the proudest of. Teaching and being taught were always his priorities, either as a tutor of his juniors in his department, head of The National Examination Board of Medical Specialties, member of the Hungarian Academy of Sciences, or as a member of the Committee of Hungarian College of Surgeons. Generations of surgeons learned from book chapters written by him and his congressional presentations in Hungary and abroad. He delivered all the three distinctive honorary lectures of the Hungarian Surgical Society and received the highest award of the Hungarian Republic. He was a member of the Executive Committee of ISDE between 1995 and 2001 as the Eastern European Representative. Being cochairman and chief organizer of the ISDE 2008 World Congress held in Budapest, he saw it as the final proof of the acceptance of the performance of Hungarian surgeons.
direct us to the Future

MASAHIRO OHGAMI (1945–2000)

Dr. Masahiro Ohgami was a towering figure in the development of better surgical approaches for patients. He exploded onto the world stage early 1990’s with his futuristic and highly technical approach to the treatment of surgical diseases. One of the greatest achievements made by Dr. Ohgami is the development of the lesion lifting method for the treatment of early gastric cancer. This is a method used for a curative and function preserving minimally invasive surgery and often called “Ohgami’s method.”

Furthermore, he developed a special way of performing endoscopic thyroidectomy after performing a case of endoscopic parathyroidectomy using original instruments. The passion for surgery which Dr. Ohgami possessed led to his working with many hi-tech corporations in Japan and the United States, whose leaders recognized the immense potential of this man. Professor Masaki Kitajima formed a team of surgeons who devoted themselves to pioneering work of endoscopic surgery. Dr. Ohgami was a primary investigator of the team and collaborated with young surgeons including Drs. Yoshihide Otani, Yuko Kitagawa, Go Wakabayashi and Masahiko Watanabe. Dr. Ohgami woke us up to the possibilities of advanced technology in surgical treatments of diseases. He had also developed the field of robotic surgery in Japan and was looking at forging a relationship with companies in Japan to perfect the ultimate machine to help the surgeons to perform the perfect task. In 1996, he introduced robotic surgery for the first time in Japan.

In 1995, his presentations at a number of important international meetings on the possibilities of telepresence, high-tech engineering of surgical instruments, and videoprocessing were like a thunderbolt to even the most highly advanced medical centers in the United States and Europe. In 1999, he lived out his dream of conducting teleconference spanning three continents.
JÁNOS REGÖLY-MÉREI (1949–2009)

Professor János Regöly-Mérei was an outstanding physician, surgeon, gastroenterologist. Even during his years at the secondary school and at the years of education in the Semmelweis University he always got the highest marks and this was appreciated by the „Sub Auspicis Rei Publicae Popularis Golden Ring Award“ given him at the MD degree celebration. He became specialist in surgery in 1977 and in gastroenterology in 1995. The Ph.D. degree was given him in 1989. He was appointed Professor and Chairman to the 3rd Surgical Department of the Semmelweis University in Budapest in 1999 where he was working until his death. He has got the highest scientific scholarship for research work (Széchenyi scholarship) for 1997-2000. Between 1998 and 2006 he was the President of the Hungarian Medical Chamber of Budapest. He was elected to the Leading Board of the Hungarian Surgical and to the Hungarian Gastroenterological Society as well. He was the deputy Editor-in-Chief of he Hungarian Medical Weekly (Orvosi Hetilap). By the scholarship of the German Academy he spent a whole year in Germany. In München, Erlangen and in Mainz he studied the possibilities of the ultrasound diagnosis. After returning Hungary he organised postgraduate courses for surgeons and gastroenterologists to educate them for the ultrasound diagnosis and ultrasound guided diagnostic and therapeutic procedures. His wide surgical-scientific interest is demonstrated by his 100 papers, more then 200 scientific lectures. He was a member of seven international societies, during a term he was the representative of the Hungarian Chapter of the International Society of Surgery. Educating for more than 30 years at the Semmelweis University he was a popular teacher of the medical students. Although he had got several awards during his surgical carrier („Pro Sanitate“,“Marton Tibor Award“, „Markusovszky Lajos Award“,“ Hippokrates Memorial Medal“ ) he was proud of the affection of his patients for him mostly. Having a special empathy he was always ready to help the patients: one could find him at the surgical department from 5 in the morning until late evening and visited the patients on Sunday as well. A surgeon,a scholar and a scientist was lost when he passed away.
Focusing the field of matrix biology, Professor Yoshihide Otani carried out research work of global importance including treatment of scirrhous gastric cancer, pathophysiology of peptic ulcer diseases and mechanisms of invasion and metastasis of gastric cancer. He also investigated suppression of gastric cancer progression using matrix metalloprotease inhibitors. In the emerging stage of laparoscopic surgery, Dr. Otani collaborated with Dr. Masahiro Ohgami to develop the lesion lifting method (Ohgami’s method), and contributed to establishing and extending this technique to more curative surgical procedures such as laparoscopy-assisted distal gastrectomy (LADG). For the surgical operation of duodenal ulcer perforation, Dr. Otani also explored clinical approach to wound healing in laparoscopic omental patch method even at the surgical operation of duodenal ulcer perforation. In addition, he devoted himself to instructing younger surgeons on his ideas to perform laparoscopic omentoplasty in a safe way, which later lead to the development of Periscope method. At that time, the majority of surgeons had negative views toward employing laparoscopic surgery on the treatment of mesenchymal tumors like gastrointestinal stromal tumor (GIST) of the stomach. Dr. Otani, however, proved the safety and validity of laparoscopic surgery for gastric GIST, and published his excellent results in Surgery. This pioneering study has been used as the primary evidence for applying laparoscopic surgical treatment to mesenchymal tumor, which is now commonly performed all over the world.
Organizing Committees

President of the 1st, 3rd & 5th Scientific Meeting of the Japan Hungarian Surgical Society:
József Sándor, M.D., Ph.D., F. A. C.S.
Professor of Surgery, Semmelweis University, Budapest, Hungary

President of the 2nd & 4th Scientific Meeting of the Japan-Hungarian Surgical Society:
Masaki Kitajima, M.D., F.A.C.S(hon), F.R.C.S(hon), A.S.A(hon)
Professor of Surgery,
President of International University of Health and Welfare, Tokyo, Japan

Local Organizing Committee of the 5th Scientific Meeting of the Japan-Hungarian Surgical Society

Attila Oláh
Róbert Langer
Attila Vörös
András Bálint
László Kóbori
György Lázár
László Damjanovich
Pál Ondrejka
Péter Horváth-Örs
Attila Bursics
László Entz
László Harsányi
György Weber
László Tóth
György Keleti
Imre Fehérvári

Andrea Ferencz,
Géza Telek
Zsolt Révész
Géza Papp,
Ákos, Nagy
Lívia Vasas
Katalin Kormos
Gerda Tóth
Mohamed E. Gamal
Réka Völgyi
Judith Sebestyén
Adrienn Tóth
Domokos Csukás,
János Bezsilla,
Sándor Bende,
József Sándor

Secretaries General in Hungary

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Secretaries General in Japan

Norihito Wada nori-krk@umin
Masashi Yoshida masashi@iuw.ac.jp

The Fifth Scientific Meeting of the Japan-Hungarian Surgical Society Organized under the high protection of His Excellency, Dr. Csaba Hende, Minister of Defence, Hungary Professor Ágoston Szél, Rector of Semmelweis University, Budapest

GENERAL INFORMATION

Date
October 4-6, 2012

Venue of the Symposium
Stefánia Palace
Entrance. 1143 Budapest, Zichy Géza u. 3.

Official language
English

Certificate of Attendance
A Certificate of Attendance will be given to active participants of the symposium

Registration Fees
There is no Registration Fee for the presenters, accompanying persons and for the audience.
Free admission.

Special bus transportation for the participants to the venue of the symposium
Starting from the Hilton Hotel (Hess András tér 1-3)

Thursday, October 4: 07.40 in the morning
Friday, October 5: 08.15

Return every day after the afternoon oral session
INSTRUCTION FOR SPEAKERS AND CHAIRPERSONS

Oral Sessions

Length of presentation
7 minutes + 3 minutes discussion, Total: 10 minutes

Equipment

Only computer presentation is provided. No slides or classic videos.
Computer provided with Windows OS. Windows 7.
All speakers must upload their presentation at last 30 minutes in advance their session to verify if the data function properly on the provided equipment.
A technician will assist to upload the presentations.

Poster Sessions

Presenters are requested to follow the schedule in the program in mounting their posters on the assigned board. Your poster number will be posted on the assigned board.
Posters will be displayed for the whole conference time
The first author is required to be present within the proper poster session period for any discussion.
Title, name of authors, co-authors, institutions must be shown in the headline.
Pins for mounting will be available at the venue and a technician will assist mounting the posters.
Poster size: 90x120 cm, standing position.
Set up time: Thursday, October 4: 08.00-08.50 and 10.00-14.30
Removal time: Friday, October 5: 15.00-15.30

Symposium organized by the contribution of the

Medical Department of the Hungarian Academy of Sciences
Semmelweis University, Budapest
Ministry of Defence, Hungary
CULTURAL AND SOCIAL PROGRAMS

October 4. Thursday

By invitation, for the Japanese and foreign participants, accompanying persons and for the guests of the symposium

„Dances of Nations” – Performance in the Palace of Arts (Művészetek Palotája)
Address: 1095 Budapest, Komor Marcell utca 1.
Time: 19.00 – 21.30
Bus starts from the Hilton Hotel (Hess András tér 1-3) at 18.20

Followed by a dinner

October 5. Friday

By invitation, for the Japanese and foreign participants, accompanying persons and for the guests of the symposium

Banquet in the Main Building of the Hungarian Academy of Sciences (Magyar Tudományos Akadémia)
Address: Széchenyi István tér 9.
Time: 19.30
Note: coctail attire
Bus starts from the Hotel Hilton (Hess András tér 1-3) at 19.15

October 6. Saturday

By invitation for the Japanese and foreign participants and accompanying persons

Whole day excursion by bus:

Herend (Porcelain Factory),
Pannonhalma (Benedictine Monastery)
Fertőd (Esterházy Palace)

Dinner in Fertőboz: Bozi Rozi Csárda

Bus starts from Hotel Hilton (Hess András tér 1-3) at 08.00 in the morning
# PROGRAM AT A GLANCE

## October 4. Thursday

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<td>Oral Session 3</td>
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## October 5 Friday

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<td>Endocrin and Breast Surgery 1.</td>
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OPENING CEREMONY OF THE
5TH SCIENTIFIC SYMPOSIUM OF THE
JAPAN-HUNGARIAN SURGICAL SOCIETY

Stefánia Palace, 1143 Budapest, Stefánia út 34-36.
(entrance from Zichy Géza utca 3.)

2012 October 4, Thursday, 09.00 a.m.

Prof. József Sándor,
Founding Co-President of the Japan-Hungarian Surgical Society
Introduction and Welcome

Greetings:

His Excellency Dr. Csaba Hende,
Minister of Defence, Hungary

His Excellency Ito Tetsuo,
Ambassador of Japan

Prof. Ágoston Szél,
Rector of Semmelweis University

Prof. István Besznyák
on behalf of the Hungarian Academy of Sciences

Prof. Attila Oláh,
President of the Hungarian Surgical Society

Dr. István Éger,
President of the Hungarian Medical Chamber

Prof. Wojciech Kielan,
on behalf of the Japan-Polish Society of Surgery

Prof. Masaki Kitajima,
Founding Co-President of the Japan-Hungarian Surgical Society
PROGRAM OF THE 5TH SCIENTIFIC SYMPOSIUM
OF THE JAPAN-HUNGARIAN
SURGICAL SOCIETY

2012 October 4-6

Venue of the symposium:
Stefania Palace, Budapest, Zichy Géza utca (street) 3

OCTOBER 4, THURSDAY

- 08.00: Registration
- 09.00-09.50 Opening Ceremony
- 09.50-10.00 Break
10.00-11.20  ORAL SESSION 1  VASCULAR SURGERY

Chairpersons: László Entz, Department of Vascular Surgery, Semmelweis University, Budapest
Katsunori Tanaka, Department of Surgery, Keio University School of Medicine, Tokyo

10.00-10.10

**01-1** PROPHILACTIC AORTIC ROOT RECONSTRUCTION IN MARFAN SYNDROME  
Zoltán Szabolcs, Elektra Bartha, Bence Ágg, Miklós Pólos  
Cardiovascular Center of the Semmelweis University, Budapest, Hungary  
(dr.szabzol@gmail.com)

10.10-10.20

**01-2** OUTCOME FOLLOWING CAROTID ENDARTERECTOMY: LESSONS FROM A LARGE VASCULAR REGISTRY  
Gábor Menyhei (on behalf of the ESVS Vascunet Group)  
Department of Vascular Surgery, Clinical Centre, University of Pécs, Hungary  
(g.menyhei@yahoo.com)

10.20-10.30

**01-3** HYBRID PROCEDURES FOR AORTIC ARCH ANEURYSMS  
Zoltán Oláh, Gábor Bíró, Hunor Sarkadi, Kálmán Hüttl, Zoltán Szeberin, Péter Sótonyi  
Semmelweis University, Department of Vascular Surgery, Heart Center, Budapest, Hungary  
(drolahzoli@freemail.hu)
10.30-10.40

O1-4  VISCERAL ARTERY ANEURYSMS: MANAGEMENT OPTIONS
Katsunori Tanaka, Hideaki Obara, Masayuki Otawara, Yasuhito Sekimoto, Taku Fujii, Yuko Kitagawa.
Department of Surgery, Keio University School of Medicine, Tokyo, Japan.
(ktanaka1969@gmail.com)

10.40-10.50

O1-5  SURGICAL MANAGEMENT OF A MULTILOCULAR AORTIC ANEURYSMA – CASE REPORT
Gábor Vallus, Csaba Dzsinich, László Szentpétery, Lajos Tóth, László Barta, Gábor Beke, Péter Berek
Military Hospital, Budapest
(vallusdr@gmail.com)

10.50-11.00

O1-6  THE USE OF CRYOPRESERVED HOMOGRAFTS, AUTOLOGOUS DEEP FEMORAL VEINS AND SILVER IMPREGNATED DACRON GRAFTS IN AORTO-ILIAC SEPTIC CONDITIONS
Zoltán Szeberin, Gábor Bíró, Mátyás Fehérvári, Gábor Viktor Szabó, Zoltán Oláh, György Acsády, László Entz
Semmelweis University, Department of Vascular Surgery, Heart Center, Budapest, Hungary
(szeberinzoltan@kardio.sote.hu)

11.00-11.10

O1-7  SIMULTANEOUS VASCULAR- AND ABDOMINAL SURGERY
Gerda Tóth, Gábor Hollós, Tamás Sztipits, József Marton, Géza Járay, Zsolt Bányász, György Keleti
Department of Vascular Surgery, Semmelweis University, Budapest, Hungary
Surgery Department of St. István and St. László United Hospital, Budapest, Hungary
Surgery Department of St. Borbála Hospital, Tatabánya, Hungary
(gerda.toth.md@gmail.com)
11.10-11.20

O1-8 NEW PERSPECTIVES IN PREVENTION AND TREATMENT OF VENOUS THROMBOEMBOLISM

Tamás Sándor MD, PhD
2nd Department of Surgery, Semmelweis University, Budapest, Hungary
(dr.sandor.tamas@t-online.hu)

11.20-11.40 Break, Poster sessions open
11.40-12.50  ORAL SESSION 2  NEW METHODS, INNOVATIONS

Chairpersons: Masaki Kitajima, International University of Health and Welfare Mita Hospital, Tokyo
Attila Oláh, Department of Surgery, Petz Aladár Teaching Hospital, Győr

11.40-11.50
O2-1  CHOLELITHIASIS AND CHOLEDOCHOLITHIASIS FOLLOWING WEIGHT LOSS SURGERY: MANAGEMENT AND TECHNICAL CONSIDERATIONS
András Sándor, M.D., F.A.C.S., F.A.S.M.B.S.
Commonwealth Surgical Associates, Stoneham, Massachusetts, U.S.A.
(andras.sandor@usa.net)

11.50-12.00
O2-2  NINE MONTHS IN AFGHANISTAN
Fruzsina Luca Dani MD
Military Hospital, Budapest, Hungary
(fruluc@gmail.com)

12.00-12.10
O2-3  RAPID EVAPORATIVE IONISATION MASS SPECTROMETRY (REIMS): A NOVEL METHOD FOR REAL-TIME INTRAOPERATIVE TISSUE AND TUMOR IDENTIFICATION
László Sasi-Szabó, Zoltán Takáts, Júlia Balog, László Damjanovich
University of Debrecen, Medical and Health Science Center, Institute of Surgery, Debrecen, Hungary
Imperial College Hospital, London, Great Britain
Medimass Inc.
(sasilaci@yahoo.com)
**12.10-12.20**

**O2-4  DEVELOPMENT AND APPLICATION OF HYPEREYE MEDICAL SYSTEM FOR ENDOSCOPIC SURGERY.**
Michiya Kobayashi, Takayuki Sato, Takeki Sugimoto, Ken Okamoto, Ken Dabanaka, Tsutomu Namikawa, Takehiro Okabayashi, Kazuhiro Hanazaki  
Department of Human Health and Medical Sciences, Kochi Medical School, Nankoku, Japan  
(kobayasm@kochi-u.ac.jp)

**12.20-12.30**

**O2-5  HEPARIN-DERIVATIVES WITHOUT ANTICOAGULANT EFFECT CAN INHIBIT METASTASIS FORMATION IN PRECLINICAL MODEL**
Biborka Bereczky, István Kenessey, Erika Simon, Krisztina Futosi, Andrea Kiss, Ferenc Erdődi, John T. Gallagher, József Timár, Pál Ondrejka, József Tóvári  
Semmelweis University 2nd Department of Surgery, Budapest, Hungary  
National Institute of Oncology Department of Tumor Progression, Budapest  
Semmelweis University 2nd Department of Pathology, Budapest  
Division of Medical Chemistry, Debrecen University, Debrecen, Hungary  
Paterson Institute for Cancer Research, University of Manchester, Manchester, UK  
National Korányi Pulmonology Institute, Department of Tumor Biology, Budapest  
(berbibi1@yahoo.com)

**12.30-12.40**

**O2-6  STRATEGIES FOR THE TREATMENT OF INGUINAL HERNIA.**
Norihito Wada, Toshiharu Furukawa, Yuko Kitagawa  
Department of Surgery, School of Medicine, Keio University  
(nori-kkr@umin.ac.jp)

**12.40-12.50**

**O2-7  DAY SURGERY (DS) IN THE WORLD, PAST, PRESENT AND FUTURE**
Gamal Eldin Mohamed  
Departament of Day Surgery & Minimally Invasive Techniques, Budaörs Medical Centre, Budaörs, Hungary  
(gamaill13@gmail.com)
O2-8  PERIFERIAL BLOOD DERIVED STEM CELL IMPLANTATION FOR PATIENTS WITH CRITICAL LIMB ISCHAEMIA
Gábor Viktor Szabó, Judit Cserepes, Zsuzsa Kövesd, György Acsády
Semmelweis University Cardiovascular Department
(szabogvdr@gmail.com)

O2-9  UNIQUE RECONSTRUCTION TECHNIQUE IN A YOUNG PATIENT AFTER MANUBRIAL RECESTION IN GRADE II. CHONDROSARCOMA
Ákos Kocsis, László Agócs, Ferenc Tóth, Pál Vadász, Ferenc Rényi Vámos
National Institute of Oncology, National Institute of Traumatology, Korány National Institute of TB and Pulmonology, Budapest, Hungary
(akoskocsis@gmail.com)

13.10-13.50 LUNCH BREAK

13.50-15.20  ORAL SESSION 3
LOWER GI SURGERY, HERNIA

Chairpersons:  János Bezsilla,
B-A-Z County Hospital, Miskolc
Yuiichi Yamashita,
Department of Surgery, Fukuoka University, Fukuoka

O3-1  PROFESSIONAL BENEFITS AND ECONOMICAL AVENUES OF NPWT
János Móricz, Peter Schuck
Hartmann-Rico Hungaria Kft
(Janos.Moricz@hartmann.info)
O3-2  LAPAROSCOPIC RESECTION FOR CROHN'S DISEASE: SAFETY, FEASIBILITY AND SHORT-TIME OUTCOMES
György Lázár, József Pieler, Attila Paszt, Zsolt Simonka, Szabolcs Ábrahám, Gellért Baradnay, László Varga
Department of Surgery, University of Szeged, Hungary (gylazar@gmail.com)

O3-3  TOTAL PELVIC EXENTERATION WITH SYNCHRONOUS URINARY RECONSTRUCTION IN ADVANCED RECTAL TUMORS
László Damjanovich
Surgical Institute, University of Debrecen, Debrecen, Hungary (dami1960@med.unideb.hu)

O3-4  LAPAROSCOPIC COLORECTAL SURGERY – BORSOD COUNTY HOSPITAL
János Bezsilla, Ákos Botos, László Sikorszki, Attila Berencsi, Rita Temesi, Zoltán Barra, Sándor Bende
B-A-Z County Hospital, Miskolc, Hungary (bezsillaj@hotmail.com)

O3-5  SIGNIFICANCE OF SENTINEL NODE TECHNIQUE IN COLORECTAL CANCER
László Sikorszki, János Bezsilla, Ákos Botos, Rita Temesi, Sándor Bende, András Vereczkei, Örs Péter Horváth
Borsod County Teaching Hospital, Department of General Surgery, Miskolc and Department of Surgery, Clinical Centre, Pécs University, Pécs (sikorszkiil@gmail.com)
O3-6  PREDICTIVE FACTORS OF PROGNOSIS IN COLORECTAL CANCER PATIENTS AFTER HEPATECTOMY FOR LIVER METASTASIS

Go Hoshino, Koji Okabayashi, Hirotoshi Hasegawa, Yoshiyuki Ishii, Takashi Endo, Yuko Kitagawa
Department of Surgery, Keio University School of Medicine, Tokyo, Japan.
(perseverant-fighter@hotmail.co.jp)

O3-7  IMPORTANCE OF PORTO-HEPATIC MISMATCHES IN THE ISSUE OF MIDDLE HEPATIC VEIN RECONSTRUCTION

Attila Szijártó, Fujimoto Yasuhiro, Uemoto Shinji
Semmelweis University, 1st Department of Surgery, Budapest,
Department of Hepatobiliary, Pancreas and Transplant Surgery,
Kyoto University Hospital, Kyoto
(szijartoattila@gmail.com)

O3-8  SHOULD ISOLATED PERITONEAL CARCINOMATOSIS FROM COLORECTAL CANCER BE SUB-CLASSIFIED INTO STAGE IVB IN ERA OF MODERN CHEMOTHERAPY?

Satoshi Hatano, Kensuke Kumamoto, Keiichiro Ishibashi, Kunihiko Amano,
Akitake Matsuzawa, Yoshitaka Tsuji, Yoichi Kumagai, Hiroyuki Baba,
Norihiro Haga, Hideyuki Ishida
Department of Digestive Tract and General Surgery, Saitama Medical Center,
Saitama Medical University
(satoshi_hatano07@yahoo.co.jp)

O3-9  INTRAPERITONEAL ONLAY MESH, LAPAROSCOPIC APPROACH IN THE MANAGEMENT OF VENTERAL HERNIAS

László Orosz, Zsolt Kanyári
Department of Surgery, Health and Medical Science Center, University of Debrecen
(oroszla@hotmail.com)
OCTOBER 5, FRIDAY

ORAL SESSIONS

09.00-10.20 ORAL SESSION 4  UPPER GI SURGERY

Chairpersons:  Wojciech Kielan,
Department of Surgery, University Wroclaw, Poland
Koichi Miwa,
Toyama Rosai Hospital, Toyama

09.00-09.10

O4-1  SURGICAL TREATMENT OF TRACHEO-BRONCHIAL STENOSIS:
FOLLOWING TRACHEO-BRONCHIAL TUBERCULOSIS
Yoshiaki Inoue, Mitsuo Nakayama, Kohei Aoki, Hiroki Fukuda,
Masatoshi Gika, Keisuke Eguchi
Department of Thoracic Surgery, Saitama Medical Center, Saitama Medical University,
(511inoue@saitama-med.ac.jp)

09.10-09.20

O4-2  THE ROLE OF LAPAROSCOPY IN THE MANAGEMENT OF GASTRIC
STROMAL TUMORS
András Bálint, Balázs Rózsa, Barnabás Brenner, Keresztély Merkel,
Miklós Máté
St Emeric Teaching Hospital, Department of Surgery, Budapest, Hungary
(andras.balint@gmail.com)

09.20-09.30

O4-3  ACCURACY OF THE MARUYAMA COMPUTER PROGRAM IN
PREDICTION OF LYMPH NODE INVOLVEMENT – FIRST EXPERIENCE
IN HUNGARY
Dezső Tóth, Sándor Kathy, Zsolt Kincses
Kenézy Teaching Hospital, (detoth@gmail.com)
09.30-09.40

O4-4 SUPRAPANCREATIC LYMPH NODE (LN) DISSECTION IN LAPAROSCOPIC GASTRECTOMY FOR GASTRIC CANCER

Shimpei Furuta, Seiji Satoh, Keizo Taniguchi, Ichiro Uyama
Department of Surgery, Fujita Health University, Toyoake, Japan
(shimpex@fujita-hu.ac.jp)

09.40-09.50

O4-5 EXCLUSION AND DIVERSION METHOD IN MANAGEMENT OF OESOPHAGEAL PERFORATIONS: OUR SIX YEARS EXPERIENCE

Tamás Vass, Ákos Balázs, Tamás Winternitz, Attila Zaránd, Péter Kokas, Péter Kupcsulik
1st Department of Surgery, Semmelweis University, Budapest, Hungary
(dr.vasst@gmail.com)

09.50-10.00

O4-6 THE DETERMINATION OF THE DOSE AND TIMING OF INDOCYANINE GREEN AND PRELIMINARY DATA ON SENTINEL NODE MAPPING OF GASTRIC CANCER

Masashi Yoshida, Akihiro Okada, Keisuke Kubota, Junko Kuroda, Tetsuya Nakamura, Junichi Saito, Michiya Kobayashi, Takayuki Sato, Yoshifumi Beck, Yuko Kitagawa, Masaki Kitajima
Department of Surgery, Center for Digestive Diseases, International University of Health and Welfare Mita Hospital, Japan
Division of Surgery, Inagi Municipal Hospital, Japan
Department of Surgery, Keio University School of Medicine, Tokyo
Department of Surgery, Kochi Medical School, Kochi University, Kochi, Japan
Department of Physiology, Faculty of Medicine, Kochi University, Kochi, Japan
(masashi@iuhw.ac.jp)

10.00-10.10

O4-7 A CASE OF MASSIVE HIATAL HERNA WITH INTRATHORACIC UPSIDE-DOWN STOMACH, TRANSVERSE COLON AND LEFT SHIFT BILE DUCT

Yasuhiro Ohara, Kazuto Kojima, Mariko Mori, Hiroyuki Fukano, Eiji Hirooka, Makoto Taka, Hiroshi Asano and Nozomi Shinozuka
Department of Gastroenterological Surgery, Saitama Medical University Hospital
(yes-yas@hotmail.co.jp)
O4-8  CLINICAL CHARACTERISTICS IN PATIENTS WITH RESECTED GASTRIC CANCER AGED OVER 80

Mai Tsutsui, Hiroya Takeuchi, Masaharu Ogura, Yuki Hirano, Koichi Wada, Rieko Nakamura, Tsunehiro Takahashi, Norihito Wada, Hirofumi Kawakubo, Yoshiro Saikawa, Tai Omori, Yuko Kitagawa

Department of Surgery, School of Medicine, Keio University
(nagasakim21@yahoo.co.jp)

10.20.12.30 BREAK

10.40-11.30  ORAL SESSION 5
ENDOCRIN AND BREAST SURGERY I.

Chairpersons:  László Harsányi,
1st Department of Surgery, Semmelweis University, Budapest
Hiromitsu Jinno,
Department of Surgery, Keio University School of Medicine, Tokyo

O5-1  THYROID CARCINOMA IN CHILDREN 25 YEARS AFTER CHERNOBYL

Géza Lukács, Ferenc Győry, Ferenc Juhász, Szabolcs Szakáll

Institute of Surgery, Regional Center for Endocrine and Breast Surgery and Institute of Pathology, University of Debrecen, Debrecen, Hungary
Medical and Health Science Centre, Debrecen, Hungary
(lukacs@med.unideb.hu)
10.50-11.00

O5-2 INCIDENTALLY DIAGNOSED PAPILLARY THYROID MICROCARCINOMA AFTER MINIMALLY INVASIVE VIDEO-ASSISTED THYROID (MIVAT) SURGERY

István Gál, Miklós Czóbel, György Wéber, Tamás Solymosi

Telki Private Hospital, Telki, Hungary
(galis@t-online.hu)

11.00-11.10

O5-3 ONCOSURGICAL SAFETY OF THERAPEUTIC MAMMAPLASTY AS A FORM OF ADVANCED BREAST CONSERVATION IN HIGH RISK BREAST CANCER PATIENTS

László Romics Jr, Judith Sebestyén, Sheila Stallard, Alison Winter, Iona Reid, Eva Weiler-Mithoff

Victoria Infirmary Glasgow, South Glasgow University Hospitals Department of Plastic Surgery, United St. Stephan and St. Ladislaus Hospital, Budapest
(Laszlo.Romics@umassmed.edu)

11.10-11.20

O5-4 COMPARISON OF LAPAROSCOPIC LATERAL ADRENALECTOMY AND POSTERIOR RETROPERITONEOSCOPIC APPROACHES

Attila Paszt, Zsolt Simonka, György Lázár

University of Szeged, Department of Surgery, Hungary
(pasz@freemail.hu)

11.20-11.30

O5-5 WHEN THE WALLS FALL DOWN- PARADIGM CHANGES IN SURGERY

Ákos Nagy, Réka Völgyi, László Bor, József Sándor, György Keleti

Szt. István – Szt. László United Hospitals, Surgical Department, Budapest, Hungary
(drnagyakosgyorgy@gmail.com)

11.30-12.00 Break
12.00-12.40 ORAL SESSION 6.
BREAST SURGERY II.

Chairpersons: György Lázár,
Department of Surgery, University of Szeged, Szeged
Yoshitaka Tsuji,
Department of Surgery, Saitama Medical University
Saitama

For the author’s request this study was attached to the poster session: P2-10

LESS THAN 4 METASTATIC LYMPH NODES LOCALIZED AT THE SUPERFICIAL AREA OF AXILLARY REGION IN THE PATIENTS WITH EARLY BREAST CANCER

Noriko Nakamiya, Toshiaki Saeki, Akihiko Osaki, Nobuko Fujiuchi, Misono Misumi, Hideki Takeuchi, Takashi Shigekawa, Michiko Sugiyama, Hiroko Hara,
Department of Breast Oncology, Saitama International Medical Center, Saitama Medical University
(nakamiya@saitama-med.ac.jp)

12.00-12.10

O6-1 DOES THE RESULT OF COMPLETION AXILLARY LYMPH NODE DISSECTION INFLUENCE THE RECOMMENDATION FOR ADJUVANT TREATMENT IN SENTINEL LYMPH NODE POSITIVE PATIENTS?
Ákos Sávolt, Péter Musonda, Gábor Péley, Zoltán Mátrai, László Tóth, Zsolt Horváth, Miklós Kásler, Csaba Polgár
Department of General and Thoracic Surgical Oncology, School of Medicine, Health Policy and Practice, University of East Anglia, Norwich, UK, Department of General Surgery, Norfolk and Norwich University Hospital, Norwich, UK, Department of Medical Oncology, Department of Radiotherapy, National Institute of Oncology, Budapest, Hungary (drsavolt@hotmail.com)
O6-2  EXTENT OF LYMPH NODE INVOLVEMENT IN BREAST CANCER PATIENTS WITH SENTINEL LYMPH NODE METASTASIS
Takeshi Murata, Maiko Takahashi, Tetsu Hayashida, Shigemichi Hirose, Hiromitsu Jinno, Makio Mukai, Yuko Kitagawa
Department of Surgery, Keio University School of Medicine, Tokyo, Japan (muratti_sakusaku@hotmail.com)

O6-3  ACCURACY OF SENTINEL LYMPH NODE BIOPSY IN BREAST CANCER PATIENTS AFTER NEOADJUVANT CHEMOTHERAPY
Hiromitsu Jinno, Tetsu Hayashida, Maiko Takahashi, Yuko Kitagawa
Dept. of Surgery, School of Medicine, Keio University (jinno@z7.keio.jp)

O6-4  SENTINEL NODE BIOPSY USING “HYPER EYE MEDICAL SYSTEM (HEMS)” A COLOR NEAR-INFRARED CAMERA IN PATIENTS WITH BREAST CANCER
Takeki Sugimoto, Takayuki Sato, Shinzo Ozaki, Taku Funakoshi, Maho Inoue, Kazuhiro Hanazaki
Department of Surgery, Kochi Medical School, Nankoku, Kochi, Japan. (sugimoto@kochi-u.ac.jp)

12.40-13.30 LUNCH BREAK
13.30-14.50 ORAL SESSION 7  HEPATOBLIARY, PANCREAS SURGERY, TRANSPLANTATION

Chairpersons: László Kóbori,
Department of Transplantation and Surgery
Semmelweis University, Budapest
Mogens Rokkjær,
Department of Surgery, Aarhus Kommunehospital.
Aarhus, Denmark
Atushi Sugioka,
Department of Surgery, Fujita Health University,
Toyoake, Aichi

13.30-13.40
O7-1 RESECTION OF KLATSKIN TUMOR
György Keleti, Péter Molnár, László Bor, Attila Solymosi, Géza Papp,
Tamás Sztipits
United St.Stephan and St.Ladislaus Hospitals.Surgical Department
Budapest, Hungary
(georg.keleti@gmail.com)

13.40-13.50
O7-2 LAPAROSCOPIC COMMON BILE DUCT EXPLORATION
Ákos Botos, János Bezsilla, László Sikorszki, Zoltán Barra, Rita Temesi,
Sándor Bende
Borsod County Teaching Hospital, Department of General Surgery, Miskolc, Hungary
(botosakos@hotmail.com)

13.50-14.00
O7-3 INNOVATIONS IN PANCREATIC SURGERY
Dezső Kelemen, Róbert Papp, Örs Péter Horváth
Department of Surgery, Clinical Centre, Pécs University, Pécs
(kelemende@gmail.com)
14.00-14.10

O7-4  TREATMENT OPTIONS OF ACUTE FUNGAL INFECTIONS
János Fazakas
Transplantation and Surgical Department, Semmelweis University
(jancsidora@gmail.com)

14.10-14.20

O7-5  NEO-ADJUVANT CHEMORADIOThERAPY FOR PANCREATIC CANCER: THE KEIO EXPERIENCE.
Minoru Kitago, Koichi Aiura, Minoru Tanabe, Osamu Itano, Masahiro Shinoda, Yuta Abe, Hiroshi Yagi, Yuko Kitagawa
Dept. of Surgery, School of Medicine, Keio University
(dragonpegasus427@gmail.com)

14.20-14.30

O7-6  NEW MONITORING FOR SCREENING OF DRUG METABOLIZING CAPACITY OF THE LIVER USING PERIPHERAL BLOOD SAMPLE. CYP-PHENOTYP AND GENOTYPE FREQUENCIES
László Kóbori, Enikő Sárváry, Zsuzsanna Gerlei, János Fazakas, Attila Doros, Dénes Görög, Imre Fehérvári, Balázs Nemes, Manna Temesvári, Pálma Porrogi, József Paulik, Diána Mocsári, Katalin Monostory
Department of Transplantation and Surgery
(koblac@hotmail.com)

14.30-14.40

O7-7  FUNCTIONAL RESULTS AFTER CONTINENCE SAVING OPERATIONS FOR VERY LOW RECTAL CANCER. LAPAROSCOPIC OR OPEN TECHNIQUE HAD BETTER RESULTS?
Péter Metzger
Surgery, Danube Hospital, Vienna, Austria
(drpetermetzger@gmail.com)
14.40-14.50

O7-8 SECOND PRIMARY CANCER (SPC) IN KIDNEY TRANSPLANTED PATIENTS
Éva Toronyi, Gyula Végső, Rita Chmel, Gergely Nagy, Szilárd Török, Katalin Földes, Robert Langer:
Semmelweis University, Transplantation and Surgical Department
(etoronyi@gmail.com)

14.50-15.00

O7-9 HIGH IMMUNOLOGICAL RISK KIDNEY TRANSPLANT RECIPIENTS DISPLAYING PERSISTENT AND CONTINUOUS DSA
László Bihari, Jerome Saltarrelli, Jacqueline Lappin, Stephen M Katz, John Eaton, Nicholas Wooley, Eva McKissick, Charles VanBuren, Ronald Kerman
Semmelweis University Department of Transplantation, Budapest, Hungary
Surgery Baylor College of Medicine, Department of Surgery, Houston, Texas, USA
(bihari.laszloadam@gmail.com)

15.00: CLOSING REMARKS
OCTOBER 4, THURSDAY

POSTER SESSIONS

11.20-12.50 POSTER SESSION 1
SURGICAL TECHNIQUES

Chairpersons: Attila Vörös, Military Hospital, Budapest
Seiji Satoh, Department of Surgery, Fujita Health University, Toyoake, Aichi

P1-1 F.A.T. – FAT AUTOLOGOUS TRANSFER
Zsolt Révész, Judith Sebestyén
Department of Plastic Surgery, United Szent István Szent László Hospital, Budapest
(zsolt.revesz.dr@gmail.com)

P1-2 LAPAROSCOPY-ASSISTED PYLORUS-PRESERVING GASTRECTOMY (LAPPG) WITH INDOCYANINE GREEN (ICG) GUIDED SENTINEL NODE BIOPSY
Tetsuya Nakamura, Masashi Yoshida, Masaki Kitajima, Naoyuki Kobayashi, Hiroshi Uchida, Yusuke Yoshikawa, Eiji Kurihara, Yoshifumi Beck, Junichi Saito
Department of Surgery, Inagi Municipal hospital, Tokyo, Japan
Department of Surgery, Center for Digestive Diseases, International University of Health and Welfare Mita Hospital, Tokyo, Japan
(tetsuyanakamura88@yahoo.co.jp)

P1-3 LAPAROSCOPIC ADRENALECTOMY AND ADRENAL-PRESEVING SURGERY
Ferenc Juhász, Ferenc Győry, Roland Fedor, András Mónika, László Damjanovich
University of Debrecen, Medical- and Health Science Center, Institute of Surgery
(fjuhasz@med.unideb.hu)
P1-4  THE OUTMOST LAYER OF THE AUTONOMIC NERVE: THE CRITICAL LAYER FOR THE SECURE AND PRECISE NODAL DISSECTION IN LAPAROSCOPIC AND ROBOTIC GASTRECTOMY FOR GASTRIC CANCER  
Seiji Satoh, Koichi Suda, Yuichiro Kawamura, Shinpei Furuta, Fumihiro Yohimura, Keizo Taniguchi, Ichiro Uyama  
Upper Gastrointestinal Surgery, Fujita Health University, Toyoake, Aichi, Japan (ssatoh415@gmail.com)

P1-5  LYMPHATIC DRAINAGE OF THE BREAST – ANATOMY AND RELEVANCES IN BREAST CANCER  
Bence Dorogi, András Szuák, Ákos Sávolt, Zoltán Mátrai, László Tóth, Ágnes Nemeskéri  
Department of Human Morphology and Developmental Biology, Semmelweis University, Budapest  
National Institute of Oncology, Budapest (dorogibence@gmail.com)

P1-6  SINGLE OR DOUBLE SIGNING ? FACILITIES IN BREAST CANCER SLNB IN OUR HOSPITAL  
Réka Völgyi, Ákos Nagy, Tamás Lang, István Irtó, György Keleti  
St. István – St. László United Hospitals, Surgical Department, Budapest (drvolgyireka@gmail.com)

P1-7  SURGICAL MANAGEMENT OF ISOLATED BREAST CANCER LIVER METASTASES (BCLM)  
Mihály Újhelyi, Emil Farkas, László Tóth, István Kenessey, Zoltán Mátrai  
National Institute of Oncology (Hungary), Department of General and Thoracic Surgery (ujmis@gmail.com)

P1-8  DUCTAL CARCINOMA IN SITU AND SENTINEL LYMPH NODE BIOPSY  
Csaba Kósá, Tamás Dinya, Zoltán Garami, Balázs Fülöp  
Institute of Surgery, University of Debrecen Medical and Health Science Centre (cskosa@gmail.com)

P1-9  METHODS OF TESTING ALK GENE IN NON-SMALL CELL LUNG CANCER  
Maria Mernyei  
Biomedical Laboratories, Pathology and Cytology Center, Tokyo (maria-path@umin.net)
1.30-15.00  POSTER SESSION 2  
CLINICAL STUDIES

Chairpersons:  László Damjanovich,  
Department of Surgery, University of Debrecen  
Michiya Kobayashi,  
Department of Human Health and Medical Sciences,  
Kochi Medical School, Nakoku

P2-1  ANALYSIS OF POSTOPERATIVE COMPLICATIONS FOLLOWING ACUTE SURGERY FOR COLORECTAL CANCER  
Dániel Kári, Diána Korsós, Zoltán Lovay, Gábor Ecsedy, Ferenc Ender

Jahn Ferenc Dél-pesti Hospital, Surgery Dept, Budapest, Hungary  
Semmelweis University Medical School, Budapest, Hungary  
(dkari7177@gmail.com)

P2-2  SHORT-TERM OUTCOMES OF LAPAROSCOPIC INTERSPHINCTERIC RESECTION FOR LOWER RECTAL CANCER AND COMPARISON WITH OPEN APPROACH.  
Nobuyoshi Matsuhashi, Kazuhiro Yoshida, Takao Takahashi,  
Kenichi Nonaka, Naoki Okumura, Kazuya Yamaguchi, Shinji Osadsa,

Gifu University School of Medicine, Department of Surgical Oncology  
nobuhisa517@hotmail.com

P2-3  THE ROLE OF RADIOGUIDED SURGERY IN THE TREATMENT OF HYPERPARATHYROIDISM  
Ferenc Győry, Géza Lukács, Roland Fedor, Ferenc Juhász, Sándor Barna,  
László Damjanovich

Scanomed Ltd  
University of Debrecen, Medical- and Health Science Center, Institute of Surgery  
(fgyory@freemail.hu)

P2-4  DIAGNOSIS AND MANAGEMENT OF THYROID INCIDENTALOMA  
Roland Fedor, Ferenc Győry, Ferenc Juhász, László Damjanovich

University of Debrecen, Medical- and Health Science Center, Institute of Surgery  
(f_roli@yahoo.com)
P2-5  TWIN STUDY ON THE HERITABILITY OF THE MOST COMMON SURGICAL DISORDERS
Ádám Domonkos Tárnoki, Dávid László Tárnoki
Department of Radiology and Oncotherapy, Semmelweis University, Budapest, Hungary
tarnoki2@gmail.com

P2-6  THE DATABASE OF HUNGARIAN SCHOLARLY WORKS – A NEW BIBLIOMETRIC TOOL
Lívia Vasas
Semmelweis University, Central Library
lvapas@lib.sote.hu

P2-7  MECHANICAL CIRCULATORY SUPPORT IN CHILDREN – EARLY EXPERIENCE IN HUNGARY
Éva Judit Németh, Luca Anna Erhardt, Imre Kassai
Gottsegen Hungarian Institute of Cardiology, Budapest
evaj.nemeth@gmail.com

P2-8  LAPAROSCOPIC RESECTION OF GASTRIC GASTROINTESTINAL STROMAL TUMORS
Zoltán Barra, János Bezsilla, Ákos Botos, László Sikorszki, Edina Kiss, Sándor Bende
B-A-Z County Hospital, Miskolc, Hungary
barrazoltn@yahoo.com

P2-9  RETROSPECTIVE ANALYSIS OF LAPAROSCOPIC PROXIMAL GASTRECTOMY FOR GASTRIC CANCER
Naoki Okumura, Kazuhiro Yoshida, Kazuya Yamaguchi, Yoshihiro Tanaka, Takao Takahashi, Shinji Osada
Gifu University School of Medicine, Department of Surgical Oncology
n-okumura@umin.ac.jp

P2-10 LESS THAN 4 METASTATIC LYMPH NODES LOCALIZED AT THE SUPERFICIAL AREA OF AXILLARY REGION IN THE PATIENTS WITH EARLY BREAST CANCER
Noriko Nakamiya, Toshiaki Saeki, Akihiko Osaki, Nobuko Fujiuchi, Misono Misumi, Hideki Takeuchi, Takashi Shigekawa, Michiko Sugiyama, Hiroko Hara
Department of Breast Oncology, Saitama, International Medical Center,
Saitama Medical University
nakamiya@saitama-med.ac.jp
5TH OCTOBER, FRIDAY

POSTER SESSIONS

09.00-10.00 POSTER SESSION 3
CLINICAL STUDIES 2

Chairpersons: Attila Paszt,
Department of Surgery, University of Szeged, Szeged-
Norihito Wada,
Department of Surgery, School of Medicine,
Keio University, Tokyo

P3-1 CORRELATION OF CLINICAL FINDINGS AND COMPLEMENTARY TESTS IN PATIENTS STUDIED BY GASTROESOPHAGEAL REFLUX DISEASE
László Bor, Gábor Hollós, György Saftics, Ákos Nagy, György Keleti
St. István - St. László United Hospitals, Surgical Department, Semmelweis University
(l_bor@t-online.hu)

P3-2 AORTIC RUPTURE RELATED DEATHS BETWEEN 1993 AND 2007, ANALYSIS OF DATA FROM ARCHIVES OF SEMMELWEIS UNIVERSITY
Péter Sótonyi, Zoltán Oláh, Zoltán Szeberin, Csaba Csobay Novák
Heart Center, Department of Vascular Surgery, Budapest, Hungary
(sotonyi@hotmail.com)

P3-3 LESSONS FROM OUR EVARS IN THE FIRST TEN YEARS
Gergely Gősi, Ágnes Laczkó, Hunor Sarkadi, Kálmán Hüttl, György Acsády
Heart Center, Department of Vascular Surgery, Semmelweis University, Budapest
(gergely.gosi@freemail.hu)
P3-4 INCIDENCE OF SURGICAL COMPLICATIONS IN HCV OR HBV INFECTED KIDNEY TRANSPLANTED PATIENTS
Gergely Nagy, Rita Chmel, Marina Varga, Enikő Sárváry, Róbert Langer, Eva Toronyi
Transplantation and Surgical Department, Semmelweis University
(karansebes@gmail.com)

P3-5 CHANGES OF PROGESTERONE-INDUCED BLOCKING FACTOR IN PATIENTS AFTER KIDNEY TRANSPLANTATION
Tamás Fekecs, György Wéber Károly Kalmár-Nagy, Péter Szakály, Péter Örs Horváth, Júlia Szekeres-Barthó, József Sándor, Györgyi Szabó, Domokos Csinkás, Miklós Czóbel, Andrea Ferencz
University of Pécs, Department of Dermatology, Venereology and Oncodermatology, Pécs, Hungary
Semmelweis University, Department of Surgical Research and Technique, Budapest
University of Pécs, Surgical Clinic, Pécs
University of Pécs, Department of Medical Microbiology and Immunology, Pécs
(fektecs@hotmail.com)

P3-6 OCCURENCE OF HEPATITIS B AND HEPATITS C INFECTION IN KIDNEY TRANSPLANTED PATIENTS
Gergely Nagy, Rita Chmel, Éva Toronyi, Marina Varga, Enikő Sárváry, Róbert Langer
Semmelweis University, Transplantation and Surgical Department
(karansebes@gmail.com)

P3-7 HARMFUL OR HARMLESS? BOTANICALS AS FOODS CAN CAUSE CONCERNS DURING SURGICAL INTERVENTIONS
Andrea Lugasi, Viktor Zimai, Gerda Tóth, Zsolt Bányász
National Institute for Food and Nutrition Science, Budapest, Hungary
1st Dept. of Surgery, Semmelweis University, St István and St László Hospitals, Budapest, Hungary
(lugasi.andrea@oeti.antsz.hu)

P3-8 CONNECTIONS AMONG HEALTH STATUS FOREBODING SURGICAL INTERVENTION, NUTRITIONAL STATUS, AND DIETARY HABITS IN HUNGARIAN POPULATION BASED ON THE DATA OF HUNGARIAN DIET AND NUTRITIONAL STATUS SURVEY 2009
Andrea Lugasi, Éva Martos, Miklós Bakács, Gerda Tóth, Zsolt Bányász
National Institute for Food and Nutrition Science, Budapest, Hungary
1st Dept. of Surgery, Semmelweis University, St István and St László Hospitals, Budapest, Hungary
(lugasi.andrea@oeti.antsz.hu)
10.40-12.40  POSTER SESSION 4  CASE REPORTS

Chairpersons:  Attila Bursics, 
Department of Surgery, Uzsoki Teaching Hospital 
Budapest
Yutaro Kato, 
Department of Surgery, Fujita Health University 
Toyoake, Aichi
András Bálint, 
Department of Surgery, St. Emerich Teaching Hospital, 
Budapest

P4-1  MINIMAL INVASIVE SURGICAL AND ENDOSCOPIC TREATMENT OF THE UPSIDE DOWN STOMACH
György Herczeg
Semmelweis Egyetem I. sz. Sebészeti Klinika 
(gyuri.herczeg@gmail.com)

P4-2  SURGICAL TREATMENT OF INTRAOPERATIVE INTUBATION BRONCHUS INJURIES
László Füstös, Károly Kovács, Csaba Oláh, Ilona Holló, Mónika Boskó, Mihály Svébis
Bács- Kiskun County Hospital, Kecskemét, Department of General Surgery 
(fustoslaszlo@freemail.hu)

P4-3  A CASE OF HEALING SEVERE DUMPING SYNDROME AFTER DISTAL GASTRECTOMY BY CHANGING RECONSTRUCTION FROM BILLROTH TO PHYSIOLOGICAL POUCH INTERPOSITION
Yasuhiro Wada, Masami Ikeda
Department of Surgery, Asama General Hospital 
(wadayasuhiro1983@gmail.com)

P4-4  RARE ESOPHAGEAL MALIGNANCY: A CASE OF MALIGNANT MELANOMA
Zsolt Duboczki, Attila Vörös, Ágnes Lóránd, Erika Tóth, László Tóth, Gabriella Liszky
National Institute of Oncology, Military Hospital Budapest 
(duboczki.zsolt@gmail.com)
P4-5 RETROPERITONEAL LIPOSARCOMA, 11 YEARS SURVIVAL AFTER 8 OPERATIONS: A CASE REPORT
Gerda Tóth, Gábor Hollós, Péter Marosvölgyi, György Saftics, Zsolt Bányász, György Keleti
Department of Vascular Surgery, Semmelweis University, Budapest
Surgery Department of St. István and St. László United Hospital, Budapest (gerda.toth.md@gmail.com)

P4-6 A CASE OF CHANGING RECONSTRUCTION FROM ROUX-EN-Y TO PHYSIOLOGICAL POUCH INTERPOSITION AFTER TOTAL GASTRECTOMY FOR THE RESIDUAL GASTRIC CANCER
Masami Ikeda, Yasuhiro Wada
Department of Surgery, Asama General Hospital (ikedam@tempo.ocn.ne.jp)

P4-7 LAPAROSCOPIC TREATMENT OF MEDIAN ARCUATE LIGAMENT SYNDROME – A CASE REPORT
Andrea Schöller, Attila Vörös, István Sugár, Zoltán Szeberin, András Novák, Pál Ondrejka
2nd Dept. of Surgery, Semmelweis University, Military Hospital, Budapest
Department of Vascular Surgery, Semmelweis University (andreascholler@yahoo.co.uk)

P4-8 TREATMENT OF IATROGENIC DUODENAL PERFORATION POST – ERCP
Zsolt Szentkereszty, Róbert Kotán, Károly Szabó, Adrienn Csiszkó, János Pósán, Dávid Kovács, László Damjanovich
Institute of Surgery, Medical and Health Science Center, University of Debrecen, Hungary (szentkerzs@freemail.hu)

P4-9 LAPAROSCOPIC ADRENALECTOMY AND HIATUS HERNIA REPAIR IN ONE SITTING
Péter Lukász, Balázs Kesserű, Tamás Kiss, Attila Vörös, Gábor Ecsedy, Ferenc Ender
Jahn Ferenc Délepesti Hospital, Military Hospital, Budapest
Surgical Department Budapest, Hungary (petluc@vipmail.hu)
P4-10  PANCREATIC TUMOR AND MID-GUT MALROTATION: A CASE REPORT

Gerda Tóth, György Keleti

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Surgery Department of St. István and St. László United Hospital, Budapest
(gerda.toth.md@gmail.com)

P4-11  LAPAROSCOPIC RESECTION OF PANCREAS TAIL TUMOR – CASE REPORT

János Pósán, Zsolt Kanyári, László Sasi Szabó, Róbert Kotán,
Zsolt Szentkereszty, Péter Sápy, László Damjanovich

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P4-12  SPONTANEOUS RUPTURE OF THE RECTOSIGMOID WITH EVISCERATION OF THE SMALL BOWELS THROUGH THE ANUS

Attila Németh, Katalin Kormos, Róbert Bukovácz, Zsolt Csapó

Flor Ferenc Hospital, Kistarcsa
(kata.kormos@yahoo.com)
13.30 – 14.30  POSTER SESSION 5
SURGICAL RESEARCH, EXPERIMENTAL SURGERY

Chairpersons: Andrea Ferencz,
Department of Surgical Research and Techniques,
Semmelweis University, Budapest
Masashi Yoshida,
Department of Surgery, International University of
Health and Welfare Mita Hospital, Tokyo

P5-1 3D MOTION TRACKING FOR LAPAROSCOPIC SURGICAL SKILL ASSESSMENT
Veronika Gödri, Dénes Nagy, Tamás Haidegger, Henriette Steiner,
József Sándor, György Wéber
Budapest University of Technology and Economics, Department of Control Engineering
and Information Technology, Budapest, Hungary
Semmelweis University, Department of Surgical Research and Techniques, Budapest,
Hungary
(haidegger@it.bme.hu)

P5-2 CORRELATION BETWEEN HUMAN GALLSTONE INFECTION AND TISSUE REACTION GENERATED BY LOST STONES – EXPERIMENTAL DATA
Bernadett Lévay, Györgyi Szabó, Viktor Nagy, Csaba Nyakas,
Mária Sasváry, Lajos Flautner, Gamal E. Mohamed
Department of Head and Neck Surgery, Oncoplastic Surgery, National Institute of Oncology
Department of Surgical Research and Techniques, Semmelweis University, y
Department of Pathology, National Health Center,
Research Institute of Sport Sciences, Semmelweis University
Department of Ambulatory Surgery, and Minimally Invasive Techniques, Budaörs Medical Center, Budaörs
(drlevayb@hotmail.hu)
P5-3  SURGICAL ANATOMY OF THE HUMAN LIVER: LIVER SURGERY AND PARTIAL LIVER TRANSPLANTATION
Department of Human Morphology and Developmental Biology, Department of Transplantation and Surgery, Department of Diagnostic Radiology and Oncotherapy, Department of Forensic Medicine, Semmelweis University, Hungary (kissmatyas@gmail.com)

P5-4  FETUIN-A SERUM LEVELS IN AORTIC ANEURYSMS OF DIFFERENT ETIOLOGIES
Zoltán Szeberin, Mátýás Fehérvári, Miklós Krepuska, Astrid Apor, Endre Rimely, Honor Sarkadi, Gábor Bíró, Péter Sótonyi, Gábor Széplaki, Zoltán Prohászka, Zoltán Szabolcs, László Kalabay, György Acsády
Department of Vascular Surgery, Semmelweis University, Budapest, Hungary
Heart Center, Semmelweis University
Third Department of Internal Medicine, Semmelweis University, Budapest
Department of Cardiac Surgery, Semmelweis University, Budapest
Department of Family Medicine, Semmelweis University, Budapest
(szebierzoltan@kardio.sote.hu)

P5-5  ADHESION FORMATION IN THE ABDOMINAL CAVITY IN A RAT MODEL – MACROSCOPIC RESULTS
Györgyi Szabó, Gamal Eldin Mohamed, Dávid Bessenyei, Erzsébet Nagy, Andrea Ferencz, József Sándor, Domokos Csinkás, Miklós Czóbel, Bernadett Lévay, György Wéber
Department of Surgical Research and Techniques, Semmelweis University, Budapest, Hungary, Budaörs Medical Center, Dept. of Day Surgery & Minimally Invasive Techniques, Budaörs, Hungary, Department of Maxillo-Facial Surgery, Hungarian National Institute of Oncology, Budapest, Hungary
(gyorgysisami@yahoo.com)
P5-6 ADHESION RELATED CELLULAR EVENTS FOLLOWING EXPERIMENTAL SURGICAL PROCEDURE IN THE ABDOMINAL CAVITY

Györgyi Szabó, Gamal Eldin Mohamed, Gabriella Arató, Bernadett Lévay, Erzsébet Nagy, Dávid Bessenyei, Domokos Csukás, Miklós Czóbel, Andrea Ferencz, József Sándor, György Wéber

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P5-7 CHANGES OF HEMORHEOLOGICAL LABORATORY PARAMETERS AND COURSE OF MEDICATION DURING EXPERIMENTAL ACUTE PANCREATITIS IN RATS.

Róbert Kotán, Norbert Németh, Ferenc Kiss, János Pósán, Kornél Misztí-Blasius, László Tóth, István Furka, Irén Mikó, Péter Sápy, Zsolt Szentkereszty

Institute of Surgery, Department of Operative Techniques and Surgical Research, Department of Clinical Biochemistry and Molecular Pathology, Department of Pathology, Medical and Health Science Center, University of Debrecen, Hungary
(kotrob@freemail.hu)

P5-8 INTESTINAL COLD STORAGE IN PACAP-38 CONTAINING PRESERVATION SOLUTION

Andrea Ferencz, György Wéber, József Sándor, Györgyi Szabó, Domokos Csukás, Miklós Czóbel, Dóra Reglödi, Gábor Jancsó, József Németh, Klára Nedvig

Semmelweis University, Department of Surgical Research and Technique, Budapest University of Pécs 1Department of Anatomy and 3Department of Surgical Research and Technique, Pécs
University of Debrecen, Department of Pharmacology and Pharmacotherapy, Debrecen Zala County Hospital, General and Vascular Surgery Department, Zalaegerszeg
(andrea.ferencz@gmail.com)
THE ARTERIAL BLOOD SUPPLY OF THE PANCREAS – A SURGICAL ANATOMICAL STUDY

Endre Gáti, András Szuák, Csaba Korom, Károly Németh, Anna Wyszoczky, Tamás Vass, Mátéyás Kiss, Ágnes Nemeshkéri, Klára Törő, László Harsányi

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OCTOBER 6TH, SATURDAY

CULTURAL PROGRAM FOR FOREIGN GUESTS
ABSTRACTS
ORAL SESSIONS

01-1

PROPHYLACTIC AORTIC-ROOT RECONSTRUCTION IN MARFAN SYNDROME

Zoltán Szabolcs, Elektra Bartha, Bence Ágg, Miklós Pólos

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The type “A” aortic dissection is the most dangerous and life threatening acute complication of the Marfan syndrome. Both the native outcome and the surgical treatment of this complication are very risky. Despite the improving surgical experience and the more effective cerebral and myocardial protection during the surgery the lethality of the surgical treatment of acute type “A” aortic dissection at Marfan patients is still high as 10-15 percent. For this reasons all the possible medical efforts should be taken for the prevention the occurring of this complication. One possible way to reconstruct the dilated aortic root prophylactic to prevent a later proximal dissection. Taking care of the rigorous indications roles of the preventive aortic root surgery 29 Marfan patients underwent prophylactic surgery in the last ten years at our institution. The average age of the patients was 22 (13-42) years. Four patients underwent a Tirone David aortic valve sparing procedure, but the majority of the patients underwent a Bentall procedure. Both the hospital and the one year lethality was equally zero. Due of the Kaplan Mayer statistical survival examination even the five year survival is as high as 93%. In the light of these excellent results is even more contrasted the 49% five year survival rate of the successfully operated type A acute aortic dissected Marfan patients. The aim of this presentation is to put into the center of the surgical thinking the importance of the preventive surgery at Marfan patients.
01-2

OUTCOME FOLLOWING CAROTID ENDARTERECTOMY: LESSONS FROM A LARGE VASCULAR REGISTRY

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Introduction
Vascunet is a collaboration of national and regional vascular registries with 10 contributing countries. The aim of the study was to assess if technical and patient-related factors are related to outcome after carotid surgery.

Patients and methods
Data from 48 035 carotid endarterectomies (CEAs) performed in 383 centres were merged into a common database and a detailed statistical analysis was carried out.

Results
CEA was performed without patch (34%), with patch (40%) or with eversion (26%) in 74% for symptomatic and in 26% for asymptomatic disease.

Overall (in-hospital and 30-day) mortality was 0.45%. Type of CEA or anaesthesia did not affect mortality, nor did contralateral occlusion. Mortality was higher in patients above the age of 75 years, for both genders ($p < 0.05$).

The overall (in-hospital) stroke rate was 1.9%, the method of anaesthesia did not affect stroke rate. It was higher in patients with contralateral occlusion (4.6% vs. 2.5%, $p = 0.002$). Standard CEA without patch had a higher stroke rate than when a patch was used (2.3 vs. 1.7%, $p = 0.015$). Female patients >75 years had a higher stroke rate than younger women (2.0% vs. 1.6%, $p = 0.078$); this difference was not observed in men.

Conclusion
Although there are limitations with registry data, the large number of cases involved provides useful information on outcomes following CEA, supplementing data from the randomised clinical trials.
HYBRID PROCEDURES FOR AORTIC ARCH ANEURYSMS

Zoltán Oláh, Gábor Biró, Hunor Sarkadi, Kálmán Hüttl, Zoltán Szeberin, Péter Sótonyi
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Introduction: Conventional surgical repair of the aortic arch using cardiopulmonary bypass and deep hypothermic circulatory arrest still carries a high rate of mortality and morbidity. Endovascular stent graft implantation has developed as a safe and feasible treatment in aortic diseases. Endovascular exclusion of aortic arch pathologies combined with an open surgical component called “hybrid” have been recently introduced among high risk and older patients to reduce morbidity and mortality.

Methods: From 2003 to 2012, 28 hybrid aortic arch procedures were performed in Vascular Department of Semmelweis University. The indications were atherosclerotic aneurysms in 21 cases, IMH, dissection and coarctation also included. We performed 6 emergency and 22 elective operations. We analyzed retrospectively the total (TAAT) and hemi aortic arch transpositions (HAAT) and the distal arch procedures. Regular CT scans were performed before discharge, in 3, 6 month and 1 year respectively. The median follow up was 4 months.

Results: The median age of patients was 64 year (52-83). 23 was male and 4 female. In emergency cases the debranching procedure and the stent graft implantation was performed in same time, the elective procedures were consecutive. We performed 7 TAAT, 15 HAAT and 6 subclavian carotid transposition. All patients survived the procedures, the perioperative mortality rate was 1/28 (3.5%) related to cardiac reason, 1 pulmonary complication occurred, no neurological or renal failure developed. During the CT scan control 6 endoleak was observed, but only one patient required further intervention.

Conclusion: Hybrid arch procedures provide a safe, technically feasible alternative to open repair for high-risk and old patients in extended aortic arch pathologies.
01-4

VISCERAL ARTERY ANEURYSMS: MANAGEMENT OPTIONS

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[Purpose] Visceral artery aneurysms (VAAs) are uncommon but important as they have a significant potential for rupture, resulting in high mortality rates. The purpose of this study was to review our experience with VAA treatment at a single institution.

[Methods and Results] Between January 1995 and May 2012, 39 VAAs were treated in 37 patients (25 males, 12 females) with mean age of 59.4 years (range, 21-80 years). Postoperative visceral artery pseudoaneurysms were excluded from this study. The lesion involved the splenic artery (SA; 20), superior mesenteric artery (SMA; 4), hepatic artery (HA; 3), common celomesenteric trunk (CMT; 2), pancreaticoduodenal artery (PDA; 4), celiac trunk (CT; 3), and gastroduodenal artery (GDA; 3). The aneurysms of 31 patients were asymptomatic, but only one aneurysm (PDA) was ruptured. 20 patients had endovascular procedures, 16 patients underwent open surgical repair, and one patient underwent embolization with bypass surgery. In the endovascular group, VAAs were treated by embolization (n= 19), and covered stent placement (n= 1). In the surgical group, VAAs were treated by splenectomy (n= 4), aneurysmectomy (n= 2), aneurysmorhaphy (n= 1), and aneurysmectomy with arterial reconstruction (n = 9). The results were satisfactory enough with no severe perioperative complication or death, but one patient (PDA) had a duodenal stenosis, which resolved with conservative management. No aneurysm reperfusion or enlargement was observed at follow-up.

[Conclusions] Our study suggests that an aggressive treatment of VAA is justified, even in the case of asymptomatic VAA, because of the low morbidity and mortality rates. Endovascular management of VAA is a reasonable and preferable alternative to open surgical repair in anatomically suitable patients. Regardless of the type of intervention, it is critically important to assess and maintain end organ perfusion via adequate collateral circulation or direct revascularization.
SURGICAL MANAGEMENT OF A MULTILOCULAR AORTIC ANEURYSMA – CASE REPORT

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P.M. a 56 years old male patient was admitted for chest pain spread to the back and diagnosed with aortic arch aneurysm, Crawford type IV thoracoabdominal aneurysm and Leriche syndrome. The surgical management of a so huge type of aortic disease wasn’t possible so far. We managed to treat the patient due to a carefully planned interdisciplinary approach, a series of surgical procedures.

step: we operate the Crawford type IV aneurysm from left side thoracolaparatomy using an aorto-aortic tube graft. For reaching the zero lending zone
step: we did a subclavian-carotid transposition.
step: we performed an aorto-bicarotid interposition from median sternotomy.
step: following an aortobiiliacal desobliteration from median laparatomy we succesfully performed through the 10mm Dacron prosthetic graft implanted formerly to the tube graft an endovascular solution of aortic arch, a stent graft implantation.

After these series of surgical procedures we discharged our patient fully recovered with no limitations in walking capacity.

We consider this case worth for presentation, because we didn’t find so far any publications neither in home nor in international literature of such a huge extension intervention, involving multiple surgical procedures. The succesfully solutions of these diseases rightly raise the question of the necessity of hybrid operating rooms, where the professional-personal and material conditions are available.
THE USE OF CRYOPRESERVED HOMOGRRAFTS, AUTOLOGOUS DEEP FEMORAL VEINS AND SILVER IMPREGNATED DACRON GRAFTS IN AORTO-ILIAC SEPTIC CONDITIONS

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Introduction: Prosthetic graft infection or the need for reconstructive arterial surgery in septic condition is a challenging situation in vascular surgery. We used arterial homografts (AH), autologous deep femoral veins (DV) and silver impregnated InterGard Dacron grafts (SG) for several years at our department depending on graft availability and the severity of general health condition of the patient. Our aim was to compare the midterm results of the three types of grafts focusing on mortality, limb salvage, reinfection and reocclusion.

Methods: We carried out a retrospective, single center study based on data of twelve years. The indication of aorto-aortic, aorto-iliac or aorto-femoral graft implantation was graft infection, aorto-duodenal fistula and septic condition caused by wet gangrene. We reviewed the hospital charts, called the patients back for follow-up visit and filled out a study query. Results: We implanted 60 grafts in a twelve years period: AHs (20), DVs (14) and SGs (26). The mean age of patients was 62 years (35-76 years), 72% were men. The mean follow-up time was 49.76 months. Early (within 30 days of surgery) death occurred in 8 (13%) and late death in 12 (20%) cases. Six patients required major amputation during the follow-up (10%). Reinfection was diagnosed in 4 cases (7%) and graft occlusion was noticed in 9 cases (15%). Reconstruction with autologous deep femoral vein showed the best results in all examined characteristics using Kaplan-Meier analysis, but no significant difference was noticed among the three groups at five years period using two-tailed Fisher exact test.

Conclusion: We did not find significant differences among the three types of grafts used for arterial reconstruction in septic conditions related to mortality, limb salvage, reinfection and reocclusion. All three proved to be a valuable therapeutic option with good rate of infection control in the treatment of graft infection and septic condition in this group of patients with high mortality and morbidity.
01-7
SIMULTANEOUS VASCULAR- AND ABDOMINAL SURGERY

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In those patients who need relatively urgent vascular and abdominal surgical procedure at the same time (for example AAA with high risk of rupture and colontumor with stenosis together) it is a big dilemma to decide which operation is the more important in the treatment. In these cases there is a chance to choose the simultaneous operation of both diseases. In the literature there are several cases mentioned where aorta aneurysm resections and other abdominal operations (cholecystectomy, inguinal hernioplasty, resection of the small bowel, right and left hemicolectomy, rectum resection, gastrectomy, nephrectomy and left hepatolobectomy) were performed together.

We reviewed the simultaneous vascular and abdominal operations in our practice from 2000 to 2011: we performed aortobifemoral bypass and nephrectomy (because of infrarenal aorta aneurysm and left kidney tumor) 2 times, an aortoiliacal bypass and sigma resection (because of vascular occlusion and tumur stenosis), and a femoropopliteal bypass combined with a palliative sigmoidestomy (because of gangrene and a rectum tumor). Theoretically in these cases the risk of graft contamination is higher, the operation time is longer and the blood loss is greater, which cause increased morbidity and mortality. In our operations, similarly to in the literature, these principles do not prevail. There wasn’t any graft suppuration, and the need of blood transfusion, and the time of the operation were less compared with separately done procedures. No mortality occurred.

All in all we can establish that in selected patients the simultaneously performed vascular and abdominal operations are safe and effective if we pay attention to the precise surgical techniques and the roles of antisepsis.

To establish the correct pre-, intra-, and postoperative criteria, we need more experience.
NEW PERSPECTIVES IN PREVENTION AND TREATMENT OF VENOUS THROMBOEMBOLISM

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During the past few decades rapidly acting parenteral drugs, unfractionated low dose hparin (LDUH) and low molecular-weight heparins (LMWHs) have been used to prevent venous thromboembolism. Vitamin K antagonists (VKAs) are currently the anticoagulants of choice for longer term treatment of venous or arterial thromboembolism. Though effective, these agents are associated with a number of drawbacks, such as hparin-induced thrombocytopenia in connection with LMWHs, the need for frequent coagulation monitoring in the case of VKAs, as well as the parenteral mode of administration in case of hparins.

Recently, new agents have been developed that directly block activated factor X (fXa), or thrombin. Rivaroxaban, apixaban, the Japanese product edoxaban and the dabigatran can be administered orally. They are highly effective for thromboprophylaxis following major orthopedic surgery with minimal bleeding events. These agents do not require routine monitoring, platelet counting or dose adjustment and have little interaction with food or other drugs.

In this presentation we summarise the currently available evidences supporting the use of the new anticoagulants. There will undoubtedly be fundamental changes in the prevention and treatment of venous thromboses by using the „xabans”, and „gatrans”. The new agents open new perspectives.
O2-1

CHOLELITHIASIS AND CHOLEDOCHOLITHIASIS FOLLOWING WEIGHT LOSS SURGERY: MANAGEMENT AND TECHNICAL CONSIDERATIONS

András Sándor
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During the workup for abdominal pain in a bariatric surgical patient cholelithiasis is among the most common differential diagnosis. The situation is complicated, when patients also present with signs and symptoms of choledocholithiasis. Since the upper gastrointestinal anatomy and per oral, transgastric access to the duodenum and the major papilla is not altered with adjustable gastric banding and sleeve gastrectomy, the surgical and endoscopic management of cholelithiasis of such patients is not dissimilar to that of the normal population.

Following Roux-en-Y gastric bypass (RYGB) or biliopancreatic diversion with duodenal switch (BPD-DS) direct access via endoscopy to the duodenum and the major papilla is prevented by the transected stomach. An ERCP is not possible via the classic route, therefore the surgical and endoscopic management algorithms need to be modified.

Typically, laparoscopic cholecystectomy is possible in patients following RYGB or BPD-DS, even, if the bariatric procedure was performed with the open technique. An intraoperative cholangiogram is mandatory, even if the preoperative laboratory values and the ultrasonography do not suggest choledocholithiasis. If choledocholithiasis is indeed present, one can proceed with laparoscopic common bile duct exploration (CBDE) and stone extraction. In case, the preoperative testing clearly demonstrate the high likelihood of common bile duct stones, and laparoscopic CBDE failed or not available, a laparoscopic assisted intraoperative ERCP is performed via transabdominal access through the excluded stomach. If all attempts at minimally invasive management fail, then a traditional open common bile duct exploration, stone extraction and T-tube placement is carried out.

In the growing number of post bariatric surgical patients routine surgical problems, such as cholelithiasis, may require modification of common surgical approach given the substantially altered upper gastrointestinal anatomy. Management of these patients can be best arranged in high volume medical centers equipped with the full armamentarium of hepatobiliary surgical and endoscopic expertise.
O2-2

NINE MONTHS IN AFGHANISTAN

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Afghanistan is not a well-known country. Most of the people does not know what is military medicine. It is usual question that a woman, a doctor how to be a soldier, and why go to a unknown land?
I was in north-Afghanistan in 2010 for 9 months as a military doctor in Pol-e-Khomri. I want to make a presentation about the difficulty and beauty of the work in extreme weather, strange culture, and different religion, how to a woman accepted herself in an islamic environment. I try to show the main tasks of a military surgeon in a mission. And last but not least I would like to present a five-year-old girl, who was treated by a unknown-origin leg problem.
RAPID EVAPORATIVE IONISATION MASS SPECTROMETRY (REIMS): A NOVEL METHOD FOR REAL-TIME INTRAOPERATIVE TISSUE AND TUMOR IDENTIFICATION

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Introduction: Immediate histological differentiation of normal and neoplastic tissues during surgical intervention has always been a problem. The methods used nowadays require time and in many cases are not reliable enough. Recently developed rapid evaporative ionization mass spectrometry (REIMS) enables the in-situ, real-time identification of biological tissues during surgical interventions.

Method: REIMS experiments were carried out using an ion trap mass spectrometer coupled to an Erbotom ICC 300 electrosurgical unit. Collection and transportation of ions were carried out using a Venturi air-jet pump and PTFE tubing. Database spectra were recorded using in-vivo, ex-vivo and post-mortem native tissue specimens which were analysed later by standard histological methods for correct tissue diagnosis. In case of open abdominal surgeries, a modified electrosurgical pencil was constructed and used to collect ions.

Results: REIMS spectra of biological tissues were found to feature a histologically specific pattern of phospholipids. Healthy human tissue and tumor database were constructed featuring spectra of adenocarcinoma and squamous cell carcinoma collected from various regions of GI tract. Tissue specimens were sectioned, and sections underwent traditional histological work-up, while the surface of remaining tissue block was subjected to spatially resolved REIMS analysis. Using this approach, gastrointestinal tissue spectrum library was constructed. Database was used as a basis for tissue identification during surgery and a tissue identification system was developed. REIMS analysis was utilized in tumor resection surgery. This way, possible micrometastases, tumorous lymphatic spreading can be tested. The method proved to be very precise especially in hepatic resection. Accuracy of tissue identification in case of tumor tissue was better than 97%, while identification of tumor tissue as healthy occurred only in 0.3% of the cases.

Conclusion: Mass spectrometry-guided surgical methods were introduced into human surgical practice. The preliminary data show a good sensitivity and specificity for the REIMS method.
DEVELOPMENT AND APPLICATON OF HYPEREYE MEDICAL SYSTEM FOR ENDOSCOPIC SURGERY

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Introduction: We developed a new imaging system (HyperEye Medical System, HEMS) for simultaneously capturing near-infrared (NIR) fluorescence of indocyanine green (ICG) and visible light ray through a unique high-sensitive charge-coupled device (CCD) area sensor that was coated with arrays of red-, green-, blue-, and NIR-specific filters. Unlike multiple-sensor systems, HEMS enables us a real-time color-NIR imaging in ICG fluorescence-guided endoscopic surgery without any special video data processor for superimposing NIR on color images. We have developed a prototype of laparoscope capturing NIR fluorescence of ICG (HEMS-E) and evaluate it in the laparoscopic colon surgery.

Methods and procedure: To label a site of interest, we injected 0.2 mL of ICG solution (1 mg/mL) and 0.2ml of Indian ink into the submucosal layer adjacent to the tumor to be resected. While ICG was excited with a custom-made xenon fiber illumination system, NIR fluorescence and color images were visualized with HEMS through a NIR-compatible endoscope.

Results: The dissolution of our new endoscopic imaging is still unsatisfactory for surgical procedure. However, even the cases that the Indian ink could not be detected by the normal laparoscopy (HD Endoeye LTF-VHTM, Olympus, Japan), our new imaging system, our HEMS-E could detect the fluorescence of ICG.

Conclusions: The dissolution of HEMS-E should be improved to accomplish the operation through this laparoscope. The detection ability of the tumor site during the laparoscopic operation by HEMS-E is superior to the standard laparoscope with the Indian ink.
HEPARIN-DERIVATIVES WITHOUT ANTICOAGULANT EFFECT CAN INHIBIT METASTASIS FORMATION IN PRECLINICAL MODEL

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Our previous molecular oncological research has shown that heparin and its derivatives can inhibit angiogenesis and metastasis formation. We have investigated the cell proliferation, migration and invasion of human melanoma cells treated with heparin fragments containing 4 to 22 monomers (dp4 - dp22). We have used in vitro and in vivo experiments on SCID mice. Only oligosaccharide dp18 had significant inhibitory effect on cell proliferation. Almost all oligosaccharides inhibited cell migration except dp8 and dp22. Anti-CD44v3 antibody stimulated cell migration and invasion, and we could decrease this effect with oligosaccharides dp4 and dp18. These fragments inhibited the catalytic activity of myosin light chain phosphatase as well. Our in vivo results show that oligosaccharides dp4 and dp18 reduced the number of lung metastases in SCID mice after injecting i.v. human melanoma cells. Dp22 proved to be ineffective in this respect. Our studies have revealed that fragments of heparin have an antimigratory and antimetastatic potential. These fragments have no anticoagulant effect, so they are potential specific antimetastatic agents in future anticancer therapy.
O2-6

STRATEGIES FOR THE TREATMENT OF INGUINAL HERNIA

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European Hernia Society (EHS) published guidelines on the treatment of inguinal hernia in adult patients in 2009. The flow diagram for the treatment of inguinal hernia indicates that Lichtenstein repair and endoscopic surgery (TEP preferred to TAPP) are recommended as a first choice to consider for primary unilateral and bilateral hernia, respectively. We adopt this strategy since 2011. The indication for TEP is male primary bilateral inguinal hernia. Patients with inguinoscrotal hernia, irreducible hernia, coagulopathy or obesity (BMI < 25.0) are excluded. Both Lichtenstein and TEP are performed under local anesthesia which enables the patient to recover quickly after surgery. Short term outcomes of the strategy in the treatment of inguinal hernia are so good that we are conducting prospective evaluation of clinical outcomes after hernia surgery in our department. This novel strategy may be promising to reduce the invasiveness and cost of hernia repair.
O2-7

DAY SURGERY (DS) IN THE WORLD, PAST, PRESENT AND FUTURE

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Since 1907, and following the publication of J. Nicoll (Glasgow, Scotland, the father of DS) about 7000 operations performed in children, DS expansion as the best elective surgical treatment began all over the world. The reasons leading to its wide spread were the new innovations in medical technology and surgical techniques, the development in pharmatherapeutics and the positive attitude of the medical professionals towards this new type of treatment. In spite of the many barriers that exist, DS is by now the method of choice for an enormous number of multidisciplinary surgical procedures, in the field of general surgery, gynecology, ophthalmology, orthopedics, ENT, Urology, anesthesiology etc. Using the new technologies, it is applied in laparoscopic operations, single-post interventions and even in robotic surgery. It is spreading in an intercontinental fashion, from US, through Europe and Australia. It is also gaining growing tendency in Asia.

The International Association For Ambulatory Surgery (IAAS) is playing a great role in disseminating the knowledge of DS, showing its priority and its cost-effectiveness, and leading the process of its education in all its activities, through the teaching courses to supported national and international congresses. The 10th IAAS Congress will be held in Budapest, 5 – 8 May, 2013, to which every participant is welcomed.
PERIPHERAL BLOOD DERIVED STEM CELL IMPLANTATION FOR PATIENTS WITH CRITICAL LIMB ISCHAEMIA

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Introduction: Regeneration of the occluded peripheral arteries by autologous stem cell therapy is an emerging treatment modality for no-option patients with peripheral artery disease (PAD). The purpose of this study was to assess safety and efficacy of in vitro expanded, peripheral blood-derived, autologous stem cells (VesCell™) in no-option PAD patients.

Methods: Phase II, open-label, randomized clinical study was performed on twenty patients, to investigate safety and efficacy of VesCell™ therapy at 1 and 3 months follow-up. The long-term (2 years) efficacy of the therapy was also evaluated.

Results: No side effects of VesCell™ therapy were found. During the 3 months’ follow-up in the control group one death occurred and 6 major amputations were performed while in the treated group there were no deaths or major amputations. The difference of limb-loss is significant between the two groups. At two years’ follow-up in the control group 2 deaths and 6 major amputations occurred, while in the treated group there were 3 major amputations. At 3 months’ follow-up the change in hemodynamic parameters (ABI and TcPO2) showed a significant increase in the treated group over the control group; in the treated group further improvement was detected at 2 years. Due to the VesCell™ treatment change in pain score, wound healing, walking ability test showed an improvement compared to the control group, and at two years incremental improvement was observed.

Conclusion: Peripheral blood-derived, in vitro expanded autologous stem cell therapy seems to be a safe, promising and effective adjuvant therapy for PAD patients.

Keywords: peripheral artery disease; stem cell therapy; angiogenic cell precursors; clinical trial
02-9

UNIQUE RECONSTRUCTION TECHNIQUE IN A YOUNG PATIENT AFTER MANUBRIAL RECESSION IN GRADE II. CHONDROSARCOMA

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Introduction: approximately 30% of malignant, primary bone tumors are chondrosarcomas, most frequent develop on the anterior chest wall. Patients who are treated with adequate surgical intervention recover, 10 years survival rate is 97%. Besides the aesthetic outcome, preservation of breathing and loading are crucial.

Methods: authors present a case of a 44-year-old male patient operated on Grade II chondrosarcoma of the manubrium. Concerning the youth of the patient, immediately reconstruction was carried out. The infiltrated part of the sternum was resected with wide margins. The reconstruction was performed with Dual Mesh covered by a pedicled left sided pectoral major muscle. As a unique technique, authors used the tendon of the semi-tendinous muscle to fix both claviculas together to give the stability and function for the chest wall.

Results: after an uneventful postoperative period the patient has a fast recovery.

Conclusion: there are no data in the literature for such a method to fixate the anterior chest wall. The method is suggested by the authors.
O3-1

PROFESSIONAL BENEFITS AND ECONOMICAL AVENUES OF NPWT

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The Negative Pressure Wound Therapy (NPWT) has been a proven method of wound management in developed countries. In Hungary it has been used regularly for approx. 4-5 years.
Unfortunately we only think of this therapeutic option when several methods have already been tried out which have proved to be not successful, or the extent of damage is extremely severe. Since the procedure is not reimbursed, hospitals only use it as a last resort.
We would like to demonstrate through the financing process of the health care institutions how NPWT could be efficiently applied after all...
LAPAROSCOPIC RESECTION FOR CROHN’S DISEASE: SAFETY, FEASIBILITY AND SHORT-TIME OUTCOMES

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Introduction: Laparoscopy is a valuable approach to treat Crohn’s disease (CD) surgically. This study was designed to evaluate the results of laparoscopic surgery and to compare to the traditional open technique in the treatment of CD.

Patients/methods: Between 2005 and 2011 study period subjects consisted of 107 patients who had primary surgical treatment for Crohn’s disease, 79 through conventional laparotomy and 28 in whom surgery was via laparoscopic approach. Exclusion criteria of laparoscopic surgery were frozen abdomen, recurrent CD following resection and perforated CD. The short-term outcomes and cosmesis were evaluated in both groups. Mann-Whitney U test and Student’s t-test were used for statistical analysis.

Results: There were no statistically significant differences between the two groups in the patient characteristics regarding BMI, age, gender, comorbidities, ASA classification. In the open group 18 (22.8%) patients had segmental small intestinal resection, 22 (27.8%) iliocolic resections, 13 (16.4%) right hemicolectomy, 6 (7.6%) subtotal colectomy, 5 (6.3%) colectomy, 7 (8.8%) Hartmann’s procedure and 8 (10.1%) combined segmental resection (colon and small intestine). In the laparoscopic group 2 (7.1%) patients had segmental small intestinal resection, 13 (46.4%) iliocolic resections, 6 (21.4%) right hemicolectomy, 6 (21.4%) subtotal colectomy and 1 (3.5%) colectomy. No patients died. Overall postoperative morbidity was similar between both groups [17 percent vs. 15 percent, P = not significant (NS)], including major surgical postoperative complications indicated reoperation (7 percent vs. 6 percent, P = NS). In the laparoscopic group the mean operative time (min) (144 ± 38.2 vs. 126.6 ± 40.3 p<0.05), hospital stay (days) (10.89 ± 6.48 vs. 8.8 ± 2.82, p<0.05) and the length of postoperative ileus (days) (2.6 ± 1.3 vs. 1.95 ± 0.9 p<0.05) was shorter. Furthermore, the minimal invasive technique resulted better cosmesis and patient satisfaction.

Conclusion: Laparoscopic resection of Crohn’s disease is safe, feasible and associated with short-term benefits.
TOTAL PELVIC EXENTERATION WITH SYNCHRONOUS URINARY RECONSTRUCTION IN ADVANCED RECTAL TUMORS

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Introduction: Most of the patients with locally advanced rectal cancer are deemed inoperable when one or more of the pelvic organs are infiltrated by the tumor. In most of the cases the prostate is the infiltrated organ or the trigone of the bladder. Partial resection is dangerous, since the clear margin can not be determined. For the patient the outlook is grim, suffering from urinary incontinence, pelvic pain, edema in the lower extremities. In cases where no distant metastases can be found, total pelvic exenteration and immediate urinary reconstruction by the Bricker type ileal conduit may help.

Methods: All tumor tissue must be removed, en-block. If necessary, loops of attached small bowel can also be excised. After mobilization of the rectum along the Waldeyer fascia, the urinary bladder is mobilized behind the symphisis, along the space of Retzius, the prostate beneath the endopelvic fascia and if needed soft tissues of the pelvic diaphragm can also be taken in continuity with the neoplasm. This complexus may only be removed through the abdominal wound, following mobilization and isolation of the rectum and anus. Ureters are mobilized and introduced into an isolated loop of terminal ileum, brought out as a typical loop ileostomy on the right, while colostomy is performed on the left.

Results: 11 patients were operated with R0 histology, this way since 2008. No major surgical complications occurred. One patient died, two are alive with recurrent disease. Those who are alive, without the sign of disease gained weight, their general health condition is good.

Conclusion: Total pelvic exenteration with immediate urinary reconstruction may offer a better quality of life than loop colostomy and permanent catheter and even the chance of long survival.
03-4

LAPAROSCOPIC COLORECTAL SURGERY –
BORSOD COUNTY HOSPITAL

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Introduction: Minimally invasive techniques have revolutionized the way we approach abdominal surgery. Since the first report of laparoscopic colectomy in 1991 developments in the field of laparoscopic colorectal surgery have been rapid. Laparoscopic colorectal surgery is technically complicated as it involves almost all advanced laparoscopic techniques. There is a steep learning curve to achieve advanced laparoscopic skills. But when the learning phase has been conquered, the benefits of laparoscopic surgery have been suggested with respect to decreased morbidity, decreased pain, faster recovery, shorter hospital stay and possibly reduced immunosuppression, comparing with open surgery.

Our Department is in a County Hospital in North-East part of Hungary. We have 72 surgical beds for general surgery. We have special interest in oncologic and especially in laparoscopic surgery.

Results: Between January 2008 and December 2011 more than 1300 patients underwent surgery for benign or malignant colorectal disease. Every 5th patient had urgent intervention, and more than half of our oncologic patient had advanced disease. After a long learning curve in the early 2000’s we can operate on laparoscopically almost 80 patients per a year, with less than 10% conversion rate. Our short term experiences as morbidity and mortality rate are comparable for other series in the literature.

Conclusion: This audit confirms that there is a long learning curve in achieving competence in laparoscopic colorectal surgery, with decrease in the conversion and complication rates with increasing experience.
SIGNIFICANCE OF SENTINEL NODE TECHNIQUE IN COLORECTAL CANCER

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Introduction: Information about the significance of the sentinel lymph nodes in colorectal cancer is contradictory or missing. Laparoscopic approach provides many advantages for patients, which is unquestionable in short-term and is equal to the open operation from the oncologic point of view. Sentinel technique has been proven to decrease the radicality of an intervention without oncologic compromise in other fields. Additionally, it may help to improve staging, especially if it is combined with the detection of micro-metastases, and can also influence the adjuvant therapy. During our open and laparoscopic colorectal operations, the sentinel node technique was introduced. Furthermore, we attempted to identify so called marker lymph nodes, which may also have prognostic significance.

Materials and methods: Between October 2009 and June 2012, sentinel lymph node sampling was performed in 188 cases of colorectal resections randomized either for open or laparoscopic approach. Right at the beginning of the operation, 1-1 ml of Patent blue dye was injected into the subserosal layer at the oral and aboral end of the tumor. Vessel dissection was started 10 minutes after marking. At the beginning, only standard sentinel lymph node sampling was performed, which later was completed with distal and proximal marker lymph node processing. Dyed lymph nodes were identified by a surgeon right after the operation and were fixed in formalin using specific markers. The pathologist considered the most intensively dyed lymph nodes, closest to the tumor, to be the sentinel ones. If the standard histology was negative, the detection of micro-metastases was also accomplished. Data were analyzed from several aspects. 1. The impact of the sentinel sampling on the extent of the resection. 2. The prevalence of micro-metastasis in patients with negative conventional histology, and its influence on the postoperative treatment and the life expectancy in certain tumor stages. 3. The connection between the marker lymph node status, and the disease recurrence or survival rate. 4. The correlation between the extent of the primary tumor and the category of the lymph node metastasis was also analyzed.

Results: If the tumor was in the T4 category, if there was a distant metastasis or if there was macroscopic lymph node positivity, the sentinel method had no use, since it did not influence the surgical technique, the extent of the resection or the postoperative treatment. In T1-T3 categories in lymph node negative cases, the micro metastasis in sentinel and marker lymph nodes can influence the postoperative treatment. In T1-T2 categories, the intraoperative examination of the sentinel lymph nodes can influence even the size of the resection, particularly in high-risk patients. The histologic category of the primary tumor did not show any changes in the metastatic lymph nodes. Significantly higher numbers of lymph nodes were detected in cases with sentinel sampling, since the identification of the blue-coloured lymph nodes were easier.

Conclusions: Sentinel node technique was successfully introduced into daily practice. Beyond the regular sentinel nodes, so called marker nodes were found to give additional information. Regarding feasibility, there was no difference between the open and the laparoscopic approaches. Further research is planned to identify whether there is a possibility of intraoperative tumor cell scattering with the sentinel method.
PREDICTIVE FACTORS OF PROGNOSIS IN COLORECTAL CANCER PATIENTS AFTER HEPATECTOMY FOR LIVER METASTASIS

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Background: Liver resection of metastatic liver tumors from colorectal cancer have been reported to have significantly impact on the prognosis than other factors. But in most case, surgeon make decision of resection of liver tumor without taking into account the prognostic factor. We evaluated the optimal predictive factors for the prognosis of colorectal cancer patients with liver metastasis.

Method: The subjects were 154 patients who had undergone hepatic resection for colorectal liver metastasis between 2003 and 2006. We retrospectively investigated the relation between overall survival and a variety of predictors, such as, age, laboratory data, postoperative chemotherapy, time to resection, histological findings, number of liver tumor, hepatic metastasis grade. Statisticaly study was performed by using Kaplan-Meier analysis, Log-Rank test, and the Cox hazard model analysis.

Result: Univariate analysis revealed that four factors, including number of lymph metastasis(N0,1vs.N2,3, P=0.016), histological findings(tub1, tub2 vs. muc, por, P<0.001), number of liver tumor(1vs.>2, P=0.009), and grading of liver metastasis(gradeA vs. gradeB,C, P<0.001) were associated with postoperative death. Multivariate analysis using four factors disclosed that the only one factor, number of liver tumor was significantly associated with a higher rate of postoperative death(Hazard ratio = 0.482 [0.259-0.898], P=0.021).

Discussion: Number of liver metastasis is able to offer reliable information for predicting postoperative death in colorectal cancer patients with liver metastasis. So single liver tumor should be resected for prolong of survival in such patients.
03-7

IMPORTANCE OF PORTO-HEPATIC MISMATCHES IN THE ISSUE OF MIDDLE HEPATIC VEIN RECONSTRUCTION

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Background: The adult living liver donor transplantation (ALDLTx) is based on the perfect knowledge of the variations of the healthy liver. The portal segmental anatomy constitutes the basis of the classical nomenclature for liver resections. The venous dominance classification of the hepatic venous system could be one of clue points of the graft selection. The aim of the study was show the importance of the portal inflow – hepatic outflow discrepancies for the further consideration of venous reconstruction during ALDLTx.

Material and Methods: 130 selected underwent ALDLTx: 65 right lobe (S5+6+7+8 without MHV) graft donors (RLGD); and 65 left lobe (S1+2+3+4 with MHV) graft donors (LLGD). In all of the donors CT imaging and 3D computer-assisted operative planning (venous territory analysis) were performed by HepaVision software. The anatomical right and left hemiliver (RHL & LHL) were analysed and compared by the portal vein and hepatic vein territories. The calculated differences showed the meaning of the porto-hepatic mismatch phenomenon.

Results: Both graft type donors had strong, significant correlations between the left hepatic vein drained area (282.3±64.9ml) and the size of the P1-3 territory (252.1±56.8 ml; R² = 0.7755; R² = 0.7476). Right hepatic vein territory (520.1±136.8ml) showed weaker but significant correlation with the P6 and P7 territories (302.0±95.5 ml; R² = 0.5843). The posterior segment mismatch in the RHL was -28.2%. The relation between the whole MHV (V4a-b and V5, V8) territory and the territory of portal inflow (P4a-b and P5, P8) also showed weak correlation (R² = 0.5463; p<0.05). This zone was divided into right (V5, V8) and left (V4a-b) marginal zone. S4a-b porto-hepatic correlation was weak (R² = 0.4753; p<0.05) but in the right marginal zone (S5, S8) much weaker correlation can be seen (R² = 0.3075). This mismatch was +27.8% in the RHL.

Conclusion: This is the first time when the approximately 28% shift from the anterior (S5, S8) to the posterior (S6-7) segment in the RHL (right lobe graft) is described. Porto-hepatic inflow-outflow mismatch pattern is equally relevant than consideration of the hepatic venous outflow in the issue of V5,V8 reconstruction.
SHOULD ISOLATED PERITONEAL CARCINOMATOSIS FROM COLORECTAL CANCER BE SUB-CLASSIFIED INTO STAGE IVB IN ERA OF MODERN CHEMOTHERAPY?

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Purpose: According to the 7th edition of the TNM staging system, metastatic colorectal cancer (CRC) at the time of initial diagnosis is sub-classified into stage IVA or IV disease. Peritoneal carcinomatosis (PC), considered to have a dismal prognosis, is exclusively sub-classified into stage IVB, even though other metastases to a sole organ are sub-classified into stage IVA, which is considered to have better survival. This retrospective study was undertaken to investigate whether this classification is still appropriate in determining a prognosis in patients with PC from CRC in the era of modern chemotherapy.

Patients and Methods: We reviewed data on patients with metastatic CRC at initial diagnosis surgically treated between January 2006 and June 2011. A survival analysis was performed paying special attention to PC.

Results: There were 69 stage IVA patients (IVA group) and 83 stage IVB. Among stage IV patients, 20 had isolated PC (PC-I group), 28 had PC with one or more other sites of metastasis (PC-II group), and 35 had at least 2 metastatic sites other than the peritoneum (NPC group). A total of 139 patients received oxaliplatin-based chemotherapy in a palliative (n=125), neoadjuvant (n=3), or adjuvant setting after R0 resection (n=11). Compared with 36.6 months in the PC-I group, median survival was 32.5 months ($P=0.48$) in the IVA group, 14.7 months ($P=0.07$) in the PC-II group, and 12.9 months ($P<0.01$) in the NPC group.

Conclusion: Isolated PC from CRC should be sub-classified into stage IVA disease rather than stage IVB in the era of modern chemotherapy.
03-9

INTRAPERITONEAL ONLAY MESH, LAPAROSCOPIC APPROACH IN THE MANAGEMENT OF VENTERAL HERNIAS

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An incisional hernia develops in 5% to 15% of laparotomy incisions. Recurrence rates after primary repair of ventral and incisional hernias range from 25% to 52%. Primary suture repair of ventral hernias has unsatisfactory results. The introduction of a prosthetic mesh to ensure abdominal wall strength without tension has decreased the recurrence rate, but open repair requires significant soft tissue dissection in tissues that are already of poor quality as well as flap creation, increasing complication rates and affecting the recurrence rate. A minimally invasive, laparoscopic approach offers an alternative solution. In our video presentation we would like to demonstrate our technique from the historic first heavy-weight prolipropilene meshes causing documented complications, till today’s lightweight composite meshes.
O4-1

SURGICAL TREATMENT OF TRACHEO-BRONCHIAL STENOSIS: FOLLOWING TRACHEO-BRONCHIAL TUBERCULOSIS

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Background: Surgical treatment of tracheo-bronchial tuberculosis requires careful operative planning and technique. We report a successful surgical care of tracheo-bronchial tuberculosis.

Case report: A 41-year-old female referred to our hospital for a close examination and treatment. She had a history of taking medicine for pulmonary tuberculosis at the age of 18. When she was 33 years old, she was suffered from asthmatic wheeze and administered bronchodilators. She was complaining of asthmatic wheeze, exertional dyspnea, and repeated right pneumonia, until tracheo-bronchial stenosis due to tuberculosis at the age of 40. CT scan and bronchoscopy revealed mucosal bridge of the carina and stenosis of the lower trachea, and the right main and intermediate bronchus.

Under general anesthesia, mucosal adhesion of the carina was removed, then tracheoplasty and the middle and lower lobectomy was performed. Postoperative course was uneventful.

The extent of the scar due to tracheo-bronchial tuberculosis might be wider than the area of stenosis. Therefore, it tends to be difficult to remove all pathologic regions.

Conclusion: To reduce tension at the point of suture, minimum resection was recommended for surgery of tracheo-bronchial tuberculosis.
04-2

THE ROLE OF LAPAROSCOPY IN THE MANAGEMENT OF GASTRIC STROMAL TUMORS

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Introduction: The gastrointestinal stromal tumors (GISTs) are rare mesenchymal neoplasms of the gastrointestinal tract with a considerable life-threatening potency. It can occur throughout the gastrointestinal tract but the most frequent location is the stomach (>50%). Its dignity varies from very low risk to very high risk. For primary resectable GIST in the absence of metastasis, surgery is the first line treatment. According to the literature in such cases the local excision of the tumor with free margin is sufficient. The patients having solitaire tumors with the size ≤ 5cm are good candidates for laparoscopic removal. Our aim was to evaluate the efficacy and safety of laparoscopic surgery of gastric GISTs.

Material and results: Between January 2007 and January 2011, 19 patients had undergone surgery because of GIST. In 14 of 19 patients the location was stomach, in 3 of 19 small intestines, in 1 patient the rectum and in 1 the retropreitoneum. 11 of 14 gastric GIST patients (7 M and 4 F with median age 62.3 ranges 30 to 80) were suitable for laparoscopic wedge resection. The average time of procedure was 78±32 min. There was no mortality and serious morbidity in the postoperative period. The postoperative hospital stay proved to be 5.6±1.9 days. Although the data concerning the efficacy of adjuvant tyrosine kinase treatment are controversial, our patients except the ones with very low risk tumor (2 pts), were treated for one year with imatinibe. Up to now there is no confirmed recurrence in this subset of patients, but they require thorough oncologic follow up.

Conclusions: In our practice the solitaire gastric GISTs with size ≤ 5 cm were suitable for laparoscopic gastric wedge resection. The minimal invasive intervention proved to be effective and safe.
O4-3

ACCURACY OF THE MARUYAMA COMPUTER PROGRAM IN PREDICTION OF LYMPH NODE INVOLVEMENT - FIRST EXPERIENCE IN HUNGARY

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Introduction: Successful identification of lymph node involvement may help to reduce the number of redundant extended lymphadenectomies in gastric cancer. The preoperative diagnostic tools have a low sensitivity and specificity determining lymph node involvement, however the Maruyama computer program (MCP) can estimate the incidence of lymph node metastases.

Methods: Our study was prospectively controlled from February 2008 to April 2011. Forty consecutive patients were evaluated by the Maruyama computer program. We defined the best cutoff points for every lymph node station and the common critical cutoff point (12%) to maximize the test validity.

Results: The sensitivity was 91.3%, specificity was 52.9% in the “12% group” and 91.3% and 64.7% in the “best group”, respectively. Positive predictive value, negative predictive value and the accuracy was 72.4%, 81.8% and 75% in the “12% group” and 77.8%, 84.6%, 80% in the “best group”. The false negative rate was 8.7%. The area under the curve value of MCP with the “best cutoff point” was higher than MCP with the “12% cutoff point”, although the difference was not significant (p=0.1441).

Conclusion: We demonstrated a similar degree of reliability of MCP to the international results, so the Maruyama computer program could be useful in preoperative decision making in Hungary for the appropriate extent of lymphadenectomy in gastric cancer.
SUPRAPANCREATIC LYMPH NODE (LN) DISSECTION IN LAPAROSCOPIC GASTRECTOMY FOR GASTRIC CANCER

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Background and aim: Innovation of AVCHD enabled to visualize minute anatomical structure including the outmost layer of the autonomic nerve which is the key of the secure and precise dissection. For the purpose of performing meticulous suprapancreatic nodal dissection in laparoscopic gastrectomy, we developed a novel maneuver as “medial approach” using high definition video (advanced video codec high definition AVCHD). Herein we present and examine our novel surgical approach of suprapancreatic nodal dissection using AVCHD surgery recording system.

Operative procedure of suprapancreatic nodal dissection: The ventral surface of the right and left celiac plexus are widely dissected and the left gastric artery is cut. By this step, the deep lymph nodes (#8 and #11p) can be sufficiently mobilized. Through the appropriate tension to the ventral side, the lymph node stations #12a and #8 are fully retrieved. Finally, the dorsal area of #11p is widely dissected.

Result: Laparoscopic magnified view using high definition video technology and “medial approach” enabled to visualize the space between the target lymph nodes and the outmost layer of the autonomic nerve surrounding the arteries. We accomplished precisely nodal dissection along this layer with less hemorrhage.

Conclusion: The combination of the clear magnified surgical view provided by high definition video and the “medial approach” is extremely helpful to educate and accomplish accurate suprapancreatic dissection in gastric cancer treatment.
EXCLUSION AND DIVERSION METHOD IN MANAGEMENT OF OESOPHAGEAL PERFORATIONS: OUR SIX YEARS EXPERIENCE

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Background: Spontaneous oesophageal rupture is a rare condition with a high mortality rate of 40-60% and its management is clouded with controversy. This retrospective single-institution study presents our esophageal exclusion and diversion strategy.

Methods: A retrospective review of ten cases presenting to 1st Department of Surgery, a tertiary center over a period of 6 years during 2006-2012 was performed. Selected patients had mediastinal drainage, internal detensionation of the oesophagus (with continuous suction), primary closure of the perforation, fundoplication, cervical oesophagostomy, exclusion of the oesophagus with non-absorbable staples and for the nutrition we created alimentary jejunostomy. Most of the patients didn’t need further surgical intervention, the closure opened spontaneously in four weeks and the cervical oesophagostomy closed during this time. By only two patients oesophago-cutaneous fistula has developed which should be closed with a second operation.

Conclusion: To date, the most effective treatment would appear to be operative management. The specific treatment of an esophageal perforation should be selected according to each individual patient. The oesophagus exclusion with non-absorbable staples, cervical oesophagostomy and fundoplication is a safe and less aggressive method which use can be recommended in selected cases.
THE DETERMINATION OF THE DOSE AND TIMING OF INDOCYANINE GREEN AND PRELIMINARY DATA ON SENTINEL NODE MAPPING OF GASTRIC CANCER

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Background and Aim: We seek for the accurate and simple method for detecting sentinel nodes of gastric cancer which can be popularized in community hospitals. The indocyanine green (ICG) fluorescence-guided method is reported to be sensitive. However, the ordinal fluorescence cameras have gray scale imaging and require a dark room. We have developed a new device, Hyper Eye Medical System (HEMS) which can simultaneously detect color and near-infrared rays and can be used under room light. This study was planned to examine whether submucosal injection of 0.5 mL of 50 μg/mL ICG on the day before operation is the adequate administration for detecting sentinel nodes using HEMS in the gastric cancer surgery.

Methods: The patients underwent gastrectomy for clinical T1a (mucosa)–T2 (muscularis propria) and clinical N0 were enrolled in the present study. As a preliminary trial, one case each of the ICG 25 and 100 μg/mL, injected on the day before operation and intraoperative injection, was examined. Then, 24 cases injected 50 μg/mL ICG on the day before operation were examined.

Results: The ICG fluorescence of the patient injected 100 μg/mL was too intense and that of the patient injected 25 μg/mL was too faint. Sentinel lymph nodes were detected in all of 24 cases injected 50 μg/mL ICG, the day before operation and number of sentinel lymph nodes per patient was 4.54 ± 2.54. Metastasis was observed in 3 cases. All of them had metastasis positive sentinel nodes. In the patient who underwent intraoperative injection, sentinel lymphatic basins could be identified.

Conclusion: The present study shows that HEMS-guided abdominal surgery is feasible under room light. Submucosal injection of 0.5 mL of 50 μg/mL ICG on the day before operation is the adequate administration for detecting sentinel nodes using HEMS in the gastric cancer surgery.
A 54-year-old female admitted to other hospital because of abdominal pain and hepatopathy, 7 days before admission. A chest X-ray showed opacification with bubble in thoracic cavity. Then she was transferred to our hospital. A CT scan revealed a large hiatus hernia with intrathoracic stomach and transverse colon located just behind the heart with resultant mild anterior shift of the whole heart. An upper gastrointestinal series revealed gastric body and antrum had migrated into the thoracic cavity and was located in the upside-down position. Further a MRCP revealed to left shift of bile duct. We diagnosed this as hiatal hernia with intrathoracic upside-down stomach, transverse colon and left shift bile duct. Then we performed surgery. The hiatal hernia defect was diameter, 6 cm. A mesh hernia repair and Nissen fundoplication by laparoscopic surgery was performed successfully. Presently, 8 months have passed since the operation, there is no sign of recurrence.
Clinical characteristics in patients with resected gastric cancer aged over 80

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Introduction: With the general aging of the population, we encounter increasing number of elderly patients with gastric cancer. The number of elderly patients undergoing surgical treatment is raising as well, along with the improvement of the medical techniques. We assessed the characteristics through their postoperative course, especially the arrhythmia cases, which is a relatively frequent complication.

Methods: 85 patients aged ≥ 80 out of 1173 total patients who underwent gastrectomy from January 2003 through July 2011 at Keio University Hospital were studied retrospectively. We divided the 85 patients into 2 groups for comparison, such as Group A (n=14): patients who had arrhythmia which needed medical intervention, and Group B (n=71): patients who had arrhythmia with no need of medical intervention or with no arrhythmia. History of cardiac diseases, BMI, %VC, FEV1.0%, Revised Cardiac Risk Index (RCRI score) were examined as preoperative factors and the operation time, infusion volume (ml/kg/hr), amount of bleeding, and existences of standard operation were examined as intraoperative factors. The lengths of stay in ICU and hospitalization after operation were examined also, as postoperative factors.

Results: Univariate analysis showed that the rate of history of cardiac diseases was significantly higher in Group A (50% vs. 20%, P=0.037). Furthermore, Group A had lower FEV1.0% (63.5% vs. 73%, P=0.035) and higher RCRI scores (2 vs. 1, P=0.006). There was no statistical difference in the intraoperative factors whereas in terms of the postoperative factors, Group A had longer stays in the ICU (0.5days vs. 0.0days, P<0.001). Moreover, there tended to be more postoperative complications in Group A. The multivariate analyses confirmed that low FEV1.0% was an independent risk factor for postoperative arrhythmia.

Conclusion: Elderly patients have relatively more preexisting comorbidities and lower cardiac standby capacity compared to young patients and so the occurrence of postoperative arrhythmia may lead to critical difficulties in patient care. The history of cardiac disease, high RCRI score, and low FEV1.0% are predictors of postoperative arrhythmia in gastric cancer patients aged ≥ 80, and especially low FEV1.0% may be regarded as a significant independent risk factor.
Introduction: Several reports published only 5 years after the accident suggested that there was a dramatic increase in childhood-thyroid-cancer incidence in areas close to the Chernobyl plant. The eastern regions of Hungary are direct neighbours of Ukraine. The authors investigated the epidemiological and pathomorphological changes that could be detected in pediatric thyroid cancer patients in the region following the Chernobyl catastrophe.

Patients and methods: The study was extended to all thyroid cases in children and adolescents of 1-18 years old who were operated on during 1961-2011 years at the Surgical Department University of Debrecen which is center of excellence of endocrine disorders. Involved in the study were 1200 patients with thyroid carcinoma among them 61 childhood and juvenile cancer (5%). They were grouped in three: Group 1 before Chernobyl, Group 2 ten years after Chernobyl, Group 3 twenty-five years after Chernobyl.

Results: There was no increase in the actual number of carcinomas after the catastrophe, however their distribution was different: the number of papillary carcinomas – mostly in child and juvenile cases – increased significantly (p<0.05). The number of Hashimoto thyroiditis showed a striking increase (p<0.01). The number of new cases of thyroid cancer that are developing in children and adolescents born after the Chernobyl accident is decreasing.

Conclusions:
1. After Chernobyl catastrophe there was an increase in the number of papillary cancer cases.
2. There was also shift towards the child and juvenile age groups.
3. It is to be noted that the thyroid tumours in children from the contaminated area (Ukraine, Belarus) were unusually aggressive compared with cases studied.
4. Special care should be taken to protect the age groups at risk from exposure to radiation.
INCIDENTALLY DIAGNOSED PAPILLARY THYROID MICROCARCINOMA AFTER MINIMALLY INVASIVE VIDEO-ASSISTED THYROID (MIVAT) SURGERY

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Despite the frequent occurrence of papillary microcarcinoma of the thyroid (PTMC), no consensus on its malignant potential or its treatment exists. The diagnosis of incidental PTMC submitted to thyroidectomy for benign disease ranging from 1.3-22%. Most guidelines recommend total thyroidectomy followed by radioiodine (RAI) treatment and TSH suppression therapy. According to other opinions, when the tumour is limited unilaterally, hemithyroidectomy of the affected side is the treatment of choice without postoperative RAI ablation.

The medical records of 185 patients who underwent video-assisted minimally invasive thyroidectomy (MIVAT) for benign disease established by US guided fine needle aspiration cytology (FNAB) were analysed based on the final pathologic report. The following parameters were evaluated: frequency of PTMC, pathological lesion size, extrathyroidal tumour extension, vascular and or lymphatic invasion, multifocal disease, extent of thyroid resection and further surgical strategy and follow up evaluation results.

In this series, authors found 11 cases (5.9%) of PTMC. The mean diameter of nodules characterized benign preoperatively by FNAB was 23.2 mm (14-33mm). The mean diameter of PTMC-s was 6.1mm (2-9mm). Two of them were encapsulated forms at the final histology. None of PTMC-s showed extrathyroidal extension and vascular or lymphatic invasion. In one case, two foci of tumour were found in the affected lobe and in the isthmus. In all cases as a primary operation, a hemithyroidectomy, was performed by MIVAT technique that is a complete extracapsular resection of the thyroid lobe together with the full isthmus and with the pyramidal lobe. A completion thyroidectomy by MIVAT technique followed by RAI was performed only in one case, where the tumour showed two tumourfoci. In the mean follow-up of 25.2±16.1 months (range= 6-65 months) including laboratory and US investigations all the patients were free of recurrent disease. Conclusions: According literature data and authors’ experience incidental diagnosis of PTMC may be frequent, but PTMC shows a variable degree of aggressiveness. An appropriate surgical treatment strategy is needed for individual patients with PTMC to avoid overtreatment for the majority of patients with “innocent cancer”. But longer and larger follow-up analysis should be done on these patients to make definite conclusions.
ONCOSURGICAL SAFETY OF THERAPEUTIC MAMMAPLASTY AS A FORM OF ADVANCED BREAST CONSERVATION IN HIGH RISK BREAST CANCER PATIENTS

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Introduction: oncosurgical safety of therapeutic mammaplasty (TM) is widely investigated. The interval between surgery and delivery of adjuvant chemotherapy (AC) is an integral part of overall oncological safety. Therefore, we examined the time between TM and AC, and compared it to wide local excision (WLE) and mastectomy (Mx) with or without immediate breast reconstruction (IBR), respectively.

Methods: data of 174 patients who underwent TM, WLE and Mx+ IBR was analyzed retrospectively. All patients were operated within three breast units of Glasgow during a period of 48 months. Time between decision to offer AC and delivery of the first cycle of chemotherapy was analyzed. Significance was calculated with Mann-Whitney and Kruskal – Wallis tests (two and four groups compared, respectively).

Results: median time to AC after TM (n=36) was 29 (16-58) days, WLE (n=66) was 29.5 (15-105), Mx only (n=56) was 29 (15-57), and Mx+IBR (n=16) was 31 (15-58) days. No significant difference was found in terms of time to AC in patients treated with TM compared to WLE (p=0.384), Mx only (p=0.828) or Mx+ IBR (p= 0.366). Further, there was no significant difference when a cumulative comparison of the four groups was carried out (p=0.507).

Conclusions: our data indicate that oncosurgical safety of TM in terms of time to chemotherapy is similar to other high risk breast cancer patients treated WLE or Mx+ IBR. This also suggests that there is no significant difference in postoperative complications rates after the four methods of surgical treatment, which would be the primary cause for a delay in delivering AC.
COMPARISON OF LAPAROSCOPIC LATERAL ADRENALECTOMY AND POSTERIOR RETROPERITONEOSCOPIC APPROACHES

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Introduction: Laparoscopic adrenalectomy (LA) has become the procedure of choice for surgical management of the adrenal gland. We set out to compare the currently used transperitoneal (TPA) and retroperitoneal (RPA) access methods for surgical removal of the adrenal.

Methods: 98 patients who underwent LA from January 1998 to 2011 were grouped according to laparoscopic method applied: RPA or TPA. A prospective database of patients treated within a single institution, the clinical presentation, imaging studies, operative intervention and clinical outcome were analysed retrospectively.

Results: 98 patients (22 men and 76 women), age varied between 28 and 69 years (mean 58.3) underwent successful unilateral LA. RPA was used for the first 28 patients and TPA for the following 70 patients. The tumour size was significantly larger in the TPA group (48.7 mm; range 23-110 mm) than in the RPA group (34.8; range 28-43 mm) (p<0.05). The mean operative time in the TPA was significantly shorter than that in the RPA group (mean 81.9 min vs. 134.5 min) (p<0.05). There was no conversion to open surgery in the TPA group, 5 conversions were required in the RPA group. The mean operative blood loss was similar in the two groups. There were no postoperative complications in either group. Oral feeding was started at postoperative hour 8 in both groups. The mean hospital stay was 4.3 days vs. 4.1 in the RPA and TPA groups, respectively. The definitive histology in the RPA and TPA groups was: adenoma (18 vs. 52), pheochromocytoma (2 vs. 9), cyst (5 vs. 7), hyperplasia (3 vs. 1) and myelolipoma (0 vs 1).

Conclusions: LA is the treatment of choice for benign adrenal lesions providing the benefits of minimally invasive procedure. Both approaches were effective and safe. We prefer the TPA approach, which provides a significantly shorter operating time without conversion.
WHEN THE WALLS FALL DOWN - PARADIGM CHANGES IN SURGERY

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During the past 30 years surgery has gone through significant changes. Before gall operations UV examinations were not made therefore we made iv. cholangiography. The solidity of that nowadays is questionable but in former times 90% of the operations we made intraoperative cholangiography. In case of gall operations it was obligatory to do gall bladder bed suture, in case of appendectomies in all cases we did double neck tilting, when we had to do the colon anastomosis we sewed in two or tree flakes. The patients were kept on short rations for a long time. In case of breast cancer and thyroid cancer in all cases we executed regional blockdissection. When a breast cancer occurred we had done ablation no matter of the size of the tumor. (I had also the chance to do Halstedt- Kocher mamma operations).

The evolution of diagnostics, the US, CT, MR examinations, ERCP and EST becoming routine medical examinations, in the past 25 years has changed the procession of the operations. Eg.: we have neglected the routine intraoperative cholangiography process. Because of the sweep of laparoscopos technics there is no need any more to do gall bladder bed suture in case of gall operations, the double appendix neck tilting in cases of laparoscopic appendectomies.

The improvement of oncology has made it possible to initiate the breast conserving operations, SLNB made the process of blockdissection unneeded in most of the occurrence. Using modern sewing machines helped a lot to decrease the resection of rectum tumors. Because of the development of the seam technology nowadays we make only one flake seams in case of anastomosis and these seams are usually running sutures.

The implementation of fast track surgery made it possible to feed the patients as soon as possible.

Where the development of surgery will lead, what walls will be fallen down?
O6-1

DOES THE RESULT OF COMPLETION AXILLARY LYMPH NODE DISSECTION INFLUENCE THE RECOMMENDATION FOR ADJUVANT TREATMENT IN SENTINEL LYMPH NODE POSITIVE PATIENTS?

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Background: The Hungarian National Institute of Oncology has just closed a single-centre randomized clinical study. The OTOASOR (Optimal Treatment of the Axilla – Surgery or Radiotherapy) trial compares completion axillary lymph node dissection (ALND) to axillary nodal irradiation (ANI) in patients with sentinel lymph node-positive (SLN+) primary invasive breast cancer. In the investigational treatment arm patients received 50 Gy ANI instead of completion ALND. In these patients we had information only about the SLN status, but the further axillary nodal involvement remained unknown. The aim of this study was to investigate whether the result of completion ALND influenced the recommendation for adjuvant treatment in SLN+ breast cancer patients.

Patients and Methods: Patients with SLN+ primary breast cancer were randomized for completion ALND (arm A – standard treatment) or ANI (arm B – investigational treatment). Adjuvant systemic treatments was given according to the standard institutional protocol and patients were followed according to the actual institutional guidelines.

Results: Between August 2002 and June 2009, 474 SLN+ patients were randomized to completion ALND (arm A-standard treatment, 244 patients) or ANI (arm B-investigational treatment, 230 patients). There were no significant differences in terms of major prognostic factors between the two arms. Two-hundred and forty-two patients (99.6%) on arm A and 229 patients (99.6%) on arm B received adjuvant systemic treatments including chemotherapy and/or endocrine treatment (p=NS). One-hundred and ninety-four patients (79.5%) received adjuvant chemotherapy on arm A and 159 patients (69.1%) on arm B (p=0.031). Two-hundred and four patients (83.6%) received adjuvant endocrine treatment on arm A and 196 patients (85.2%) on arm B (p=NS). Six patients (2.5%) received adjuvant trastuzumab treatment on arm A and 13 patients (5.7%) on arm B (p=NS).

Conclusions: The result of completion ALND after positive SLNB appears to have no major impact on the administration of adjuvant systemic therapy.
EXTENT OF LYMPH NODE INVOLVEMENT IN BREAST CANCER PATIENTS WITH SENTINEL LYMPH NODE METASTASIS

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Introduction: Axillary lymph node dissection (ALND) is a standard procedure in patients with positive sentinel lymph node (SLN). However, the appropriate level of ALND remains to be elucidated. The aim of this study is to determine the extent of lymph node involvement and predictors to assess non-SLN status in patients with metastatic SLNs.

Methods: A prospective database of 235 breast cancer patients with metastases in SLNs who underwent ALND at Keio University Hospital from January 2001 to December 2011 was reviewed.

Results: The median age of the patients was 54 years (range 28-86 years) and the mean tumor size was 2.08±0.74 cm. The mean total number of sentinel, level I, and level II lymph nodes removed was 2.72, 18.2, and 2.47, respectively. Other tumor factors include 66.5 % lymphatic invasion positive, 23.7 % being nuclear grade 3, 89.4 % estrogen receptor positive, and 83.2 % progesterone receptor positive. Among 235 patients with SLN involvement, non-SLN metastases were identified in 72 (30.7 %) patients and 13 (5.5 %) patients had metastases at level II nodes. A univariate analysis showed a significant correlation between non-SLN involvement and number of tumor-involved SLNs. The mean number of tumor-involved SLNs in patients with positive non-SLNs was 1.86 compared with 1.33 in patients with negative non-SLNs (p=0.001). Patients with 2 or more positive SLNs showed a significantly higher rate of non-SLN metastases compared with patients with 1 positive SLNs (47.4 % (37/78) vs. 22.3 % (35/157), p<0.001). The mean number of tumor-involved SLNs in patients with positive lymph nodes in level II was 2.08 compared with 1.46 in patients with negative lymph nodes in level II (p=0.016). Patients with 2 or more positive SLNs showed a significantly higher rate of metastases at level II nodes compared with patients with 1 positive SLNs (10.3% (8/78) vs. 3.2 % (5/157), p=0.0026).

Conclusion: Among 235 patients with SLN involvement, the positive rate of non-SLN metastases was 30.7 %, whereas that of level II lymph nodes was 5.5 %. The number of tumor-involved SLNs was a significant predictor of non-SLN involvement and level II lymph node metastases.
O6-3

ACCURACY OF SENTINEL LYMPH NODE BIOPSY IN BREAST CANCER PATIENTS AFTER NEOADJUVANT CHEMOTHERAPY

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Background: Sentinel lymph node biopsy (SLNB) is a potential alternative to conventional axillary lymph node dissection (ALND) in clinically node-negative breast cancer patients. Neoadjuvant chemotherapy (NAC) is a standard of care for patients with locally advanced breast cancer and indications of NAC have been widespread to operable breast cancer patients to facilitate breast conserving surgery. However, the accuracy of SLNB in breast cancer patients who received NAC is still controversial.

Patients and Methods: Seventy-two patients with stage II or III breast cancer who were treated with NAC from January 2001 to October 2008 were included in the study. All patients underwent SLNB followed by completion ALND. Sentinel lymph node (SLN) was detected using a combined method of injecting isosulfan blue dye and small-sized technetium-99m-labeled tin colloid (particle size: 200-400 nm in diameter) peritumorally and subcutaneously. SLNs were evaluated by means of H&E and immunohistochemical staining.

Results: The identification rate of SLN was 93.1% (67/72). Twenty-five (46.3%) patients had metastatic SLNs and 8 out of those 25 patients had false-negative SLNB (false-negative rate (FNR) of 32.0%). Tumor size before NAC was not correlated with FNR. FNR was lower in patients with negative clinical node status and this difference was not statistically significant. FNR in N0 and N1-2 patients was 16.7% (2/12) and 35.3% (6/17), respectively.

Conclusions: SLNB after NAC was associated high FNR in patients with positive clinical nodes. For patients with negative clinical nodes before NAC, SLNB could replace ALND.
O6-4

SENTINEL NODE BIOPSY USING “HYPER EYE MEDICAL SYSTEM (HEMS)” A COLOR NEAR-INFRARED CAMERA IN PATIENTS WITH BREAST CANCER

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Introduction: We developed a new imaging system (Hyper Eye Medical System, HEMS) for simultaneously capturing color and near-infrared (NIR) fluorescence of indocyanine green (ICG). HEMS enables us a real-time color image navigation surgery during lymphatic mapping and resection of the sentinel lymph nodes (LNs). The purpose of this study was to evaluate usefulness of HEMS in sentinel lymph node biopsy (SLNB) in patients with early breast cancer.

Methods: A combination of custom-made optical filters for attenuation of visible light and enhancement of NIR fluorescence was mounted on a unique high-sensitive CCD image sensor. A light source for excitation of ICG dye was made with an array of light emitting diodes (LED) at 780 nm.
In a single institutional prospective study, 253 patients with T1-2 breast cancer underwent SLNB since April 2007. After subdermal injection of ICG dye around the areola, transcutaneous tracing of lymphatic flow and mapping of the sentinel LNs were guided by HEMS. As control routine, a combination use of a gamma probe method for scanning radioactive colloid in the sentinel LNs and a naked eye method for locating the sentinel LNs stained with indigo carmine was simultaneously performed.

Results: In all 253 patients, SLNs were successfully identified using HEMS. Moreover, the images of HEMS could be used as a real-time intraoperative navigator.

Conclusion: The NIR-fluorescence color imaging method with HEMS would be useful for identification of SLNs as well as a standard combination of RI and blue-dye methods.
Resection of Klatskin Tumor

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The diagnosis, the surgical solution and the curative surgical resection of the hilar cholangiocarcinoma is a challenge problem nowadays, too. The aim of this presentation is to evaluate the resectability and the survival lines of the surgical resection of Klatskin tumor. Data of patients undergoing resection in the last 20 years were analyzed. Between 1988 and 2008, 97 resection of Klatskin tumor were performed. Among these patients 24 local resection, 18 central liver resection, 47 hepatolobectomy and 8 portal vein resection were performed. The resectability rate of these resection procedures was 33.3% (97/291). The rate of the curative resection was 43.3% (42/97). In the second 10 years the rate of curative resection was not increased, because in this period the criteria of the curative resection was 5-10 mm. distance from the resection line to the tumor’s border. The five years survival time was 18.6%, tumor free five years survival was in 14 cases, ten years survival in 10 cases. Very important monitoring was the correlation between the preoperative biliary drainage and the postoperative morbidity, mortality and the survival time.

Conclusion: On the basis of survival time and lines, the most important prognostic factors were the R0 resection, the histopathological gradiens and the perineural tumor spread. In the patients who underwent preoperative drainage there was a significant elevation of the postoperative morbidity and mortality.
LAPAROSCOPIC COMMON BILE DUCT EXPLORATION

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Introduction: Despite of proven advantages of laparoscopic common bile duct exploration (LCBDE) versus endoscopic stone removal via sphincterotomy, it is rarely performed due to its technical difficulties and high expenses. Based on nationwide consensus, in Hungary LCBDE is indicated when the endoscopic approach is unsuccessful or ductal stones are revealed intraoperatively.

Methods: Eighty patients have been selected for LCBDE in our institute since 1999. Indications: unsuccessful stone removal or patient’s refusal of endoscopy, and intraoperatively proven bile duct calculosis. Flexible choledochoscope was used for the exploration of bile ducts. The transcystic route was preferred, but in most cases choledochotomy was necessary to remove the stones. The common bile duct was closed primarily or with the insertion of a T-tube.

Results: The transcystic approach was successful in 12 cases. Choledochotomy must be performed in 68. Conversion was necessary in 11 cases. Mortality hasn’t occurred. Bile leakage was observed in 3 cases, requiring re-operation in two. Transient bleeding occurred in one case. Retained stone was detected in one, which was extracted by endoscopy. In all other cases the postoperative course was uneventful.

Conclusion: By our experience, LCBDE might be performed safely with low morbidity.
Introduction: Surgical morbidity after pancreatic resections is still high. The authors report their innovations in pancreatic surgery, which could decrease the complications.

Methods: The following techniques were developed and/or applied in pancreatic resections: a modification of pancreatojejunostomy, antecolic duodeno(gastro)-jejunostomy with Braun anastomosis, retrograde dissection of the pancreatic head and wrapping of the vessels with ligamentum teres hepatis flap, as well.

Results: The pancreatic fistula rate decreased to 5.9% with the implantation pancreatojejunostomy and the occurrence of delayed gastric emptying dropped to 2% after antecolic reconstruction. The results gained with the technique of retrograde dissection and ligamentum teres hepatis flap were also advantageous.

Conclusion: Morbidity rate after pancreatic resections can be decreased by novel techniques, which underlines the importance of continuous innovations.
TREATMENT OPTIONS OF ACUTE FUNGAL INFECTIONS

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The incidence of fungal infection had increased in the last 20 years to the 4th most common infections in the ICU (normal ward: 1-8%, ICU >10%, among the immunocompromised patients >30%). The use of broad spectrum antibiotics and invasive i.v. catheters, the parenteral nutrition after the surgical intervention all of them play a major role in the appearance of a fungal infection. Actually the fungal infections are related with 44-45% mortality. The revised definition of the invasive fungal infection is based on fungus positive hemoculture or fungus positive BAL, nasal sinuses or urine culture associated with positive clinical or radiological findings. The Ag PCR positive liquor for Cryptococcus means also invasive fungal infection. Actually 75% of invasive fungal infections are caused by Candida species. The suspected fungal infection is based on risk factors (neutropenia, T cell based immunosuppression, the use of corticosteroids more than 0.3 mg/kg/day minimum 3 weeks) and positive clinical picture with direct or indirect mycological findings. Every 12h delay of the appropriate treatment as an independent predictor increase the mortality with 10%. The antifungal treatment could be prophylactic or therapeutic in proven or suspected fungal infection. Very briefly the recommendations are the following: the prophylactic treatment must be carried out with fluconazole in high risk patients with high incidence of candida infection. The suspected and invasive fungal infection treatment is recommended according to the immune status of the patient and the presence or not of the critically ill state. The non-neutropenic patient treatment must be started with fluconazole except the presence of the critically ill or previous azole treatment when the echinocandin treatment is mandatory. The presence of the immunocompromised state especially the neutropenic patient treatment must be started with echinocandin therapy; only in a small well defined subpopulation of these patients the voriconazole could be also effective. The treatment should be administered more 2 weeks after the first negative culture result.

O7-5

NEO-ADJUVANT CHEMORADIOOTHERAPY FOR PANCREATIC CANCER: THE KEIO EXPERIENCE

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Introduction: Because of the high incidence of local recurrence and liver metastasis, long-term outcomes for patients after resection of T3-, pancreatic cancer are extremely poor. We evaluate both the feasibility and efficacy of our neo-adjuvant chemoradiotherapy (NACRT) for T3 pancreatic cancer patients.

Methods: During the period from 2003 to 2011, 24 patients with T3- pancreatic cancers received NACRT with 5-FU (300mg/day day1-5/week x4 weeks), heparin (6000IU/day for 4 weeks), MMC (4mg/body day 1, 8, 15, 22), CDDP (10mg/body day2, 9, 16, 23), and radiation (2Gy, day1-5/week x4 weeks, total 40Gy).

Results: NACRT was completed for all 24 patients. Seven patients (29%) did not undergo pancreatectomy because either distant metastases or progressive local tumors had been detected after chemoradiotherapy. The remaining 17 patients (71%) underwent pancreatectomy without postoperative or in-hospital mortality. The 5-year survival rate after pancreatectomy was 52.6%. Postoperative Histopathological study revealed a marked degenerative change in cancer tissue, showing negative surgical margins (R0) for 15 patients (88%) and pathological CR for 2 patients (8%).

Conclusion: Results of this trial suggest that our NACRT is feasible for the treatment of T3-pancreatic cancer and seems promising for improving long-term outcomes for patients with T3-cancers of the pancreas.
NEW MONITORING FOR SCREENING OF DRUG METABOLIZING CAPACITY OF THE LIVER USING PERIPHERAL BLOOD SAMPLE. CYP-PHENOTYP AND GENOTYPE FREQUENCIES

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Drug-metabolizing capacity of the liver or transplanted liver graft depends on levels and activities of cytochrome P450 enzymes (CYP). All kind of liver injury increase the morbidity and mortality rate after liver surgery or transplantation. Hepatic encephalopathy, kidney failure and poor liver function are signs of poor outcome. Inter-individual variations in CYP genes result in differences in drug metabolism.

Metabolomic and transcriptomic tools were used for CYP-phenotyping, based on the fact that strong correlation exists between CYP enzyme activities in the liver and expression at mRNA level in leucocytes. For CYP-genotyping genomic DNA was extracted from the leukocytes or from the liver tissues of the donors and genotype analysis for single nucleotide polymorphism (SNPs) was performed by PCR.

Phenotyping 100 liver donors, the incidence of transplanted poor metabolizer liver grafts was up to 37%. CYP gene expression in the donor leucocytes presented poor metabolism in 37 % for CYP3A4 and CYP2C9, in 13% for CYP2C19. The incidence of these poor metabolizer livers was higher, up to 75 % in males. Intermediate and extensive metabolizers were documented too. Biopsy showed drug toxicity in only 48%. Permanent ‘poor metabolism’ for CYP2C9, CYP2C19 and CYP3A5 was attempted to be estimated by CYP-genotyping of liver donors. In this donor group, 13.7 % carried one, and 0.98 % carried two CYP2C9*2 mutated alleles, while 12.7% carried one, no donors carried two CYP2C9*3 mutated alleles. Furthermore, 33.3% of the donors were found to be heterozygous and 2 % homozygous for the CYP2C19*2, while no CYP2C19*3 was detected, 10.78% carried one and all the others 89.22 % carried two CYP3A5*3 mutated alleles. No homozygous wild types were detected for CYP3A5 gene.

In summary, prospective non-invasive investigation of CYP status of the liver can be beneficial in clinical practice. Individual medication can improve the liver and kidney function, can reduce the level of encephalopathy with lower morbidity and mortality rate after major liver surgery.
FUNCTIONAL RESULTS AFTER CONTINENCE SAVING OPERATIONS FOR VERY LOW RECTAL CANCER. LAPAROSCOPIC OR OPEN TECHNIQUE HAD BETTER RESULTS?

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There were 76 patients enrolled in the period from October 2004 to December 2009, with intersphincteric rectal resection for low rectal cancer. Forty-one patients (83, 7%) have maintained capability to control solid or liquid stool and the capacity of flatus continence after the surgery. Among these patients, 27 (55, 1%) patients were able to control solid stool and occasionally lost continence of liquid stool. Only five patients have retained partial rectal function—with good continence of solid stool, but not liquid—after the operations, but average times of defecation per day over the course of 36 months following the surgery were 3-5 times/day. Anal manometry showed a decrease in pressure during the resting time after intersphincteric resection, and this change remained during the follow-up period. Data of pre-and postoperative manometry, Wexner Score of open versus laparoscopic technique, quality of life and sexual function after operation are demonstrated and discussed.
07-8
SECOND PRIMARY CANCER (SPC) IN KIDNEY TRANSPLANTED PATIENTS

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Introduction: The risk of developing a tumour is higher among transplanted patients than in the normal population. The risk of developing a tumour after transplantation is increasing with the time, 20 years after transplantation it can be 40 %. Rising population age and advances in treatment with improved survival from cancer have led to more frequent survivors of cancer treatment and subsequently to more patients with a second primary tumour. Immunosuppressive therapy permits the growth and spread of inadvertently transplanted malignant cells. The prevalence of patients with second primary cancer is reported in various cancer registries with 6.6 % to 9 % incidence. Here, the risk of developing new primary cancer in cancer survivors, depending on age, compared to the general population is increased at least by 20 %.

Patients and method: 231 solid organ tumours were diagnosed between 1973 and 2011 at our Department. 89 tumours were diagnosed during the last 5 years, it means 17,8 newly discovered tumours per year. We investigated the incidence of a second primary cancer (SPC). 15 patients had tumours prior to transplantation and 4 of them developed a second primary tumour after transplantation.

Results: 11 patients developed a second primary cancer after transplantation. The average age of patients at the time of transplantation was 46,72±14,98 years. The average time elapse between transplantation and diagnosis of the tumour was 80,72 ±63,53 months. The time between the detection of the first and of the second tumour was 26,18 months. Three patients died, the average survival time form the diagnosis of the first tumour until death was 81,66 months. Six patients are still alive with a good kidney function, the survival time since the diagnosis of the tumour was 41,66 ± 40,67 months. Two patients had to return to dialysis, their survival time since tumour diagnosis was 41 months.

Conclusion: The incidence of tumour in the transplanted patients is higher than in the normal population. The age of recipients is increasing, do the possibility of non detected tumours is also increasing. Wand more attention should be paid to the possible synchronous tumours. With the use of the new immunosuppressive drugs a good survival rate can be expected among transplanted tumour patients.
HIGH IMMUNOLOGICAL RISK KIDNEY TRANSPLANT RECIPIENTS DISPLAYING PERSISTENT AND CONTINUOUS DSA

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Introduction: HLA Ab or DSA pre/post transplantation (Tx) has been associated with poor renal graft outcomes. It is unclear which HLA sensitized patient will or will not experience rejection or graft loss. The purpose of our study was to identify recipients (recips) at greatest risk for post Tx rejection and/or graft loss.

Methods: We evaluated 277 renal-Tx recips that had sufficient pre/post HLA Ab data. Antibody mediated rejections (AMR) were biopsy confirmed and treated with Thymoglobin, Pheresis and Rituxin while cellular rejections were treated with steroids. All donor-recips were ABO compatible and transplanted following a negative donor-specific FCXM using historical and pre-Tx recip sera. Recips were risk-ranked according to whether they had or did not have HLA and/or DSA post-Tx. A subgroup of patients with persistent HLA or DSA Ab (presenting at least two or more times) was identified. HLA Ab and/or DSA were identified using SAB (One Lambda, Inc.) and a Luminex based solid phase assay platform. Mean Fluorescence Intensity (MFI) of 1,000 was considered positive.

Results: Of 277 renal Tx recips, 92 presented with no HLA or DSA post-Tx while 185 recips had positive Ab post-Tx. Of the 185 recips with Ab post-Tx, 31% (58/185) presented with DSA. The frequency of AMR for no Ab vs positive Ab post-Tx was significantly different 8% (7/92) vs 21% (39/185), p < 0.01 as was the three year graft survival of 92% (82/92) vs 87% (164/185), p < 0.02 for the same patients. There were 58 patients with positive post-Tx Ab that were DSA positive, however, only 67% (39/58) of these displayed persistent Ab and only 54% (21/39) of these lost their grafts. Moreover, 50 recips that presented with a pre-Tx positive DSA would not have been considered for a donor crossmatch using the virtual crossmatch.

Conclusions: These data suggest that not all post-Tx Abs that are DSA positive result in AMR or graft loss. Recips with persistent DSA appear to be at a higher immunological risk for AMR and/or graft loss.
F.A.T. - FAT AUTOLOGOUS TRANSFER

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Introduction: Recent technical advances in fat grafting and the development of surgical devices, have made fat grafting a relatively safe and effective procedure. Lipofilling is now performed mainly to improve the breast contour, the face contour.

Methods: Fat was harvested mainly from the abdomen, thighs. A collective chart review of all lipofilling procedures. Guidelines issued by the American Society of Plastic Surgeons in 2009 announced that fat grafting to the breast is not a strongly recommended procedure. The purpose of this series is to review our experience with fat grafting for the correction of acquired breast and body deformities.

Results: It is helpful in all types of reconstructions and aesthetic procedures to improve contour, volume, and overall breast shape and symmetry. Repeat injections are often required and this is more common in patients with a history of radiation therapy.

Conclusions: Since the 1980s, there has been an increased interest in autogenous fat grafting for breast augmentation. Autologous fat grafting has become a common. Since its introduction, refinements in harvesting and grafting techniques have improved results. Multipotent adult stem cells are present in human adipose tissue. This cell population, termed adipose-derived stem cells (ADSC), represents a promising approach to future cell-based therapies, such as tissue engineering and regeneration. Tissue augmentation by fat grafting does have several advantages in that it is a noninvasive procedure and results in minimal scarring.
P1-2

LAPAROSCOPY-ASSISTED PYLORUS-PRESERVING GASTRECTOMY (LAPPG) WITH INDOCYANINE GREEN (ICG) GUIDED SENTINEL NODE BIOPSY

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Introduction: It is the times of the individualization surgery in the 21st century. When we perform laparoscopy assisted pylorus preserving gastrectomy (LAPPG), it is necessary we preserve a infrapyloric artery, and to do dissection of infrapyloric lymph nodes (#6). As for the infrapyloric artery, there is time to do a branch from an anterior superior pancreaticoduodenal artery and from a right gastroepiploic artery and from a gastroduodenal artery. We need attention in particular at the time of pattern that infrapyloric artery does a branch of from a right gastroepiploic artery. We show the matters that require attention.

On the other hand, We transduced sentinel lymph node biopsy as the made-to-order surgery in LAPPG which was reduction surgery. We seek for the accurate and simple method for detecting sentinel nodes of gastric cancer which can be popularized in community hospitals. The indocyanine green (ICG) fluorescence-guided method is reported to be sensitive. However, the ordinal fluorescence cameras have gray scale imaging and require a dark room.

Methods: We have developed a new device, Hyper Eye Medical System (HEMS) which can simultaneously detect color and near-infrared rays and can be used under room light. We detect sentinel nodes using HEMS after submucosal injection of 0.5 mL * 4 of 50 mg/mL ICG on the day before operation in the gastric cancer surgery.

Results: Sentinel lymph nodes were detected in all of 6 cases injected 50 mg/mL, the day before operation and number of sentinel lymph nodes per patient was 3.6+-2.1. Metastasis was observed in one case. All of ICG fluorescence-positive sentinel nodes were positive for the metastasis. In the patient who underwent intraoperative injection, sentinel lymphatic basins could be identified.

Conclusion: We need attention in particular at the time of pattern that infrapyloric artery does a branch of from a right gastroepiploic artery. With laparoscope induction of the HEMS, further reduction surgery such as the perioperative sentinel lymph node biopsy and gastrectomy partial may be enabled in the gastric cancer surgery.
P1-3

LAPAROSCOPIC ADRENALECTOMY AND ADRENAL-PRESEVING SURGERY

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Purpose: Many patients with small adrenal masses undergo total adrenalectomy. We evaluate the outcomes of partial adrenalectomy by performing a comprehensive literature review and our experience.

Materials and Methods: Laparoscopic partial adrenalectomy was performed in patients with paragangliomas, von Hippel-Lindau disease and bilateral pheochromocytoma when there was evidence of normal adrenocortical tissue on preoperative imaging or intraoperative examination. Suture ligature or a harmonic scalpel was used to excise the tumors, leaving a 2 to 3 mm margin of normal tissue.

Results: Twelve patients underwent laparoscopic partial adrenalectomy and 8 patient had a simultaneous transperitoneal laparoscopic bilateral adrenalectomy with preservation of normal adrenocortical tissue, while four patient underwent “two stage” adrenalectomy. Two patient required hydrocortisone replacement. There has been no pheochromocytoma recurrence during short-term followup.

Conclusions: Surgical outcomes and perioperative complications of partial adrenalectomy are similar to those reported for total adrenalectomy. The simultaneous transperitoneal laparoscopic adrenalectomy is also a safe and feasible procedure. When partial adrenalectomy is performed for small adrenal lesions, the rate of malignancy is negligible, the recurrence rate is low, and the vast majority of patients remain steroid independent at long-term follow up. These data strongly support acceptance of partial adrenalectomy as a first line treatment for small uni-or bilateral adrenal masses.
Clear magnified surgical view provided by recent technological progress, including high definition video and 3D imaging, enables us to dissect lymph nodes more accurately in gastric cancer treatment. One of the most striking factors which are influenced by this advancement is visualization of the space between the target lymph nodes and the outmost layer of the autonomic nerve surrounding the arteries. We have been focusing upon this layer, since precise nodal dissection along this layer guarantees secure and optimal surgical treatment with less hemorrhage. This presentation consists of two issues, that is, surgical approach to perform nodal dissection along the outmost layer and technical differences between the laparoscopic and the robotic surgery with regard to layer-oriented dissection as described below.

Surgical approach: For the purpose of performing meticulous suprapancreatic nodal dissection, we developed a novel maneuver as “medial approach”. In Step 1, the left gastric artery is cut and the ventral surface of the right and left celiac plexus are widely dissected. By this step, the deep lymph nodes (#8 and #11p) can be fully mobilized. In Step 2, the lymph node stations #12a and #8 are retrieved under appropriate tension. Finally, in Step 3, the dorsal area of #11p is widely dissected and the lymph node station #11p is dissected along the superior edge of the pancreas. By the “medial approach”, the outmost layer can be easily visualized throughout the entire process of the suprapancreatic nodal dissection. Furthermore, we introduce our standard surgical touch focusing upon the outmost layer. Briefly, we visualize the space between the lymph node and the outmost layer by appropriate tension and clear magnified view. Short-pitch dissection of this space makes it possible to retrieve the target lymph nodes precisely. Technical differences between the laparoscopic and the robotic surgery will be also mentioned in the presentation.
LYMPHATIC DRAINAGE OF THE BREAST — ANATOMY AND RELEVANCES IN BREAST CANCER

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Introduction: The high mortality rate of breast cancer emphasizes its great importance among malignant diseases in Hungary. For the accurate staging, therapy and prognosis the determination of the sentinel lymph node (SLN) involvement is essential, however, several questions arise concerning the regional lymphatic network (i.e. number and location of SLN, extraaxillar spreading, intra-, and postoperative complications). The functional lymphatic drainage of the breast is widely investigated, but anatomical variations are poorly documented.

Methods: The axillary region of a middle-aged formaldehyde-fixed male cadaver was exposed and regional lymphatic structures (lymph nodes, afferent and efferent lymph vessels) were dissected by classical anatomical and microsurgical techniques. The related literature was reviewed.

Results: The fine microanatomical dissection technique that we applied could successfully display the axillary lymphatic network. All the five lymph node groups (anterior, posterior, lateral, central, apical), their connecting lymph vessels and the adjacent nerves, arteries and veins of the axilla can be identified.

The clinical classifications of the axillary lymph nodes are useful but their locations change depending on the position of the arm, so their interpretation requires precise anatomical knowledge. Since the most common postoperative complications are the sensory loss and lymphedema, these risks could be reduced by sparing the important anatomical structures crossing the operating field.

Conclusion: We could explore and study the whole axillary lymphatic network and its relation with surgically important structures. The detailed knowledge of the lymphatic anatomy can provide the basis of further investigations that can help to understand the spreading directions of tumor cells and can help to reduce intra-, and postoperative complications. Our future aim is to make statistically relevant number of preparations and to work out new techniques in the research of regional lymphatic networks. We consider that confrontation of clinical data on the functional lymphatic drainage with anatomical data on lymphatic networks would be essential.
P1-6

SINGLE OR DOUBLE SIGNING? FACILITIES IN BREAST CANCER SLNB IN OUR HOSPITAL

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In our department we do SLNB in case of breast cancer since 1996. In the first 4 years we made the sentinel signing and searching only with double signing according to the professional suggestions. In Károlyi Sándor Hospital we proceed the isotopic signing one day before, 30 minutes before the operations patent bleu retromamillar injection was made. During the operation we searched the visibly blue painted lymph node with the gamma detector. In the past 2 years we were forced to work with single blue painting signing because of technical reasons. So the patient had received the blue painting 30 minutes before the operation and we only search the lymph nodes relied on our eyes.

In the last 2 years we had compared 126 double signed SLNB with 23 single signed operations.

We examined the length of the operation time, the magnitude of incision, the finding rates and the histology results. The operation time for the sentinel operation had taken 15 minutes longer than the average. In 6 cases we couldn’t find the sentinel nodes and this take 26 percent in front of the double signed operations, which rate takes 6 percent. Based on the histology there was no difference in the number of positive lymph nodes.

Conclusion: the operation time was a little bit longer but it didn’t affect the recovery of the patients. The founded lymph nodes were positive in the same percentage but the number of not founded lymph nodes was significantly higher. Whenever it’s possible it’s necessary to do the SLNB with double signing. If it’s not possible after discussed with the patient letting know the disadvantage is off the process, the SLNB can be done with single signing.
SURGICAL MANAGEMENT OF ISOLATED BREAST CANCER LIVER METASTASES (BCLM)

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Introduction: Metastatic breast cancer is a systemic disease with limited therapeutic options and conventional treatment at this stage of the disease is the palliative chemotherapy. Reports from recent years suggest that aggressive multimodal chemotherapy increases survival of selected patients with isolated liver metastasis. The purpose of our study is to compare the efficacy of systemic chemotherapy with the combination of chemotherapy and surgical therapy in isolated breast cancer liver metastasis.

Methods: In our prospective study performed during 1999 - 2006 years we performed surgical therapy (radical resection or radiofrequency ablation) after chemotherapy of 18 patients with isolated breast cancer liver metastasis. Obtained results were compared with the results of 18 patients with isolated breast cancer liver metastasis who had only systemic chemotherapy at the same period of time. The number of the metastasis in this two groups were 28 (average size: 22.6 mm, range: 10-68 mm) and 23 (average size: 22.5 mm, range: 10-50 mm). The differences of the overall and breast specific survival (p=0.22) as well as progression-free survival were evaluated using the Kaplan-Meier method. The possible prognostic factors for overall survival (age, stage of disease at the primary treatment, histologic grade, ER and PgR status, general condition of patients, time elapsed between the primary tumor and liver metastasis appearance, number and size of liver metastases, chemotherapy response rate) were analysed with univariate Cox-regression analysis. The average observation duration in the two groups were 26.7 months (range: 11-63 months) and 24.8 months (range: 4.51 months), respectively.

Results: The 3-year-survival in surgical and chemotherapeutic groups were 49.0% and 28.9% (p = 0.14) respectively, the breast cancer specific survival was 51.9% and 28.9% (p = 0.22) respectively, the progression-free survival was 19.4% and 13.3% (p = 0.11) respectively. The median time to progression was 16.1 and 12 months, respectively. In univariate analysis the significant prognostic factors for overall survival were the stage of disease at the primary care (St. I-II vs. III-IV; p = 0.021), the chemotherapy response rate (CR-PR vs. SD-PD; p = 0.037) and the general condition of patients (ECOG 0 vs. 1; p = 0.025).

Conclusions: The early results of the surgical treatment after systemic chemotherapy for isolated liver metastatic breast cancer hold great promise. The progression-free and overall survival in selected patients was increased. The main prognostic factors are the conditions of surgical liver metastasis resection and the post-chemotherapeutic metastasis regression.
DUCTAL CARCINOMA IN SITU AND SENTINEL LYMPH NODE BIOPSY

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Introduction: Ductal carcinoma in situ (DCIS) cannot give axillary metastases by definition, but the initial diagnosis does not ensure the absence of invasion on final excision. Axillary lymph node status is the most important prognostic factor of survival in women with breast cancer. The aim of this study was to evaluate whether sentinel lymph node biopsy (SLNB) is required in these cases.

Methods: A retrospective analysis of 50 patients was performed who had a preoperative core biopsy showing pure DCIS between January, 2006 and December. 31 patients had SLNB and 8 patients underwent axillary block dissection (ABD).

Results: 2 of the 39 patients had positive (sentinel) node (5.1%). Histological evaluation proved invasive disease in 17 cases (34%). Both node positive cases were upstaged to invasive ductal carcinoma (IDC). We found statistically significant correlation between invasivity and age, nuclear grade and a palpable mass. In case of pure DCIS no metastases were found (0/32).

Conclusion: Our results suggest that - despite the preoperative diagnosis of DCIS - SLNB should be considered as part of the primary surgical treatment in case of elevated risk of invasive disease.
P1-9

METHODS OF TESTING ALK GENE IN NON-SMALL CELL LUNG CANCER

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The echinoderm microtubule-associated protein-like 4 (EML4) and anaplastic lymphoma kinase (ALK) gene which are both located on short arm of 2nd chromosome, were found rearranged or translocated in non-small cell lung cancer (NSCLC) forming a fusion gene. The protein produced by their fusion gene can be detected by 3 methods: 1) immunohistochemistry (IHC) 2) fluorescent in-situ hybridization (FISH) 3) protein chain reaction (PCR).

The (ALK)-positive advanced non-small cell lung cancer can be treated by crizotinib which received approval by the US Food and Drug Administration and reached Phase 3 clinical trial in Japan.

In Europe lung cancer accounts for 20% of cancer-deaths, NSCLC accounts for 85% of lung cancer and remains difficult to treat. Approx.75% of NSCLC patients are diagnosed late, where 5 year survival rate is only 6%. However, ALK-translocation lung cancers response dramatically to ALK tyrosin-kinaze blocker (crizotinib) when patients are selected appropriately.
P2-1

ANALYSIS OF POSTOPERATIVE COMPLICATIONS FOLLOWING ACUTE SURGERY FOR COLORECTAL CANCER

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Aim: To improve results of acute surgeries for colorectal cancer (CRC).

Introduction: Colorectal cancer is an important topic, because it is one of the top 3 most common malignant tumors and in Hungary its mortality and incidence unlike worldwide is still rising.

Methods: Authors analyzed data of 2004-2006, then 2007-2011. In 2007 based upon findings and gained experience of the first period, a change of approach in treatment plan was made.
Acute admissions due to complications from CRC were analyzed, where the CRC diagnosis was not known before, it was only revealed during work-up or during emergency surgery. No other exclusion criteria were set.

Results: Main endpoints were anastomotic leak, postoperative (30 day) mortality, resectability. Clavien-Dindo classification was used for all postoperative complications. ASA was used for patients’ risk assessment. TNM used for tumor stages. Leakage ratio of the 1st and 2nd period were 26% vs 2.6%. Mortality rate 22% - 17%. Resectability ratio slightly emerged from 69% to 81% as more experience gained and improving the conditions. Morbidity and TNM were the same in both cycles, with equally bad numbers. More than half of the patients were in ASA 4-5 classes and in more than half of them locally invasive cancers or tumors already with metastases were found. According to the Clavien-Dindo classification death is still a very high risk complication following acute surgeries for CRC.

Conclusion: Resection with primary anastomosis is recommended in low-risk patients. In the event of high-risk patients bridging methods are good alternatives. They allow performing elective surgery with all of its advantages of better outcome and better results, thus making it possible to reduce the number and the complications of acute surgeries. Surgery should only be performed in cases of CRC patients with acute complications when personnel and material resources at least similar to elective surgery can be ensured.
CRC identified in the early stages mean a 5-year survival rate of 90%, although only 30% of all the currently diagnosed cases live after 5 years. The aim would be for the CRC patients is to reach surgery in as early stage of the disease as possible, at least before complications develop. Prevention is vital, as well as education and screening.
P2-2

SHORT-TERM OUTCOMES OF LAPAROSCOPIC INTERSINHINCTERIC RESECTION FOR LOWER RECTAL CANCER AND COMPARISON WITH OPEN APPROACH

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BACKGROUND: To evaluate the short-term surgical outcomes of laparoscopic intersphincteric resection (ISR) for lower rectal cancer, and to compare them with a case-control series of open ISR.

METHODS: Between July 2008 and August 2012, 20 patients with lower rectal cancer underwent laparoscopic ISR, and 15 of 20 patients who underwent laparoscopic ISR were compared with the control open ISR group of patients. The present study aimed to evaluate both technical feasibility and safety of ISR and short-outcomes after laparoscopic ISR.

RESULTS: There was no perioperative mortality, 3 complications occurred in 3 patients, and the morbidity rate was 15.0% (3/20). Postoperative complication was detected in 1 bleeding, 1 ileus in the laparoscopic ISR group. The rate of severe complications of grade ≥3a was 15.0% and that of grade ≥3b was 5.0% (Clavien-Dindo classification). Regarding the matched case-control study, the operative time was significantly longer (p <0.05), but blood loss was significantly lower (p<0.05) in the laparoscopic ISR group. The median postoperative hospital stay was 13.6 days in the laparoscopic ISR group, which was significantly shorter than in the open ISR group (18.8 days). Cancer recurrence was detected in 1 (5%) patients: 1 in inguinal lymph node.

CONCLUSIONS: Laparoscopic ISR for lower rectal cancer provides benefits in the early postoperative period without increasing morbidity or mortality.
THE ROLE OF RADIOGUIDED SURGERY IN THE TREATMENT OF HYPERPARATHYROIDISM

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Introduction: The traditional surgical approach to primary hyperparathyroidism has included bilateral neck exploration with visualizing all parathyroid tissue and removing the enlarged parathyroid gland(s). In the hands of an experienced surgeon this approach has a success rate of over 95%. With advances of preoperative localization of parathyroid tissue with $^{99m}$Tc-MIBI imaging and intraoperative parathyroid hormone assay minimally invasive radioguided parathyroid surgery has become a widely accepted alternative in appropriately selected cases.

Methods: In our retrospective study data of 163 patients were analyzed, operated on at our institute for primary (132) or secondary (31) hyperparathyroidism between 2006 and 2010. Intraoperative parathormon assay was performed routinely.

Results: Ectopic localization of the parathyroid gland were found in 28 cases. In 13 out of the 132 primary hyperparathyroidism cases the operation failed. Successful reoperations were achieved in 7 out of the 9 reoperations with radioguided surgery. Overall success rate was 95%.

Conclusion: Multiglandular appearance and ectopic localization are the main cause of failure in the parathyroid operations. Success rate may exceed 95% with the simultaneous use of intraoperative parathormon assay and radioguided surgery in experienced hand. These technics are also the basis of minimally invasive parathyroidectomy.
P2-4

DIAGNOSIS AND MANAGEMENT OF THYROID INCIDENTALOMA

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Thyroid incidentalomas are detected by imaging investigations, or during operations unrelated to the thyroid gland. With the increasing use of cross-sectional imaging and screening measurements, the prevalence of these lesions increases. These nodules are always asymptomatic, mostly benign, but rarely malignant disease or the suspicion of malignancy could occur. The management of these lesions is controversial, there is no guideline to follow and the optimal strategy for treatment is unknown.

With the help of our statistical system we have the chance for the prospective analysis of the last year’s operations. We evaluate the diagnostic steps and the operational methods and analyze the histological results and the complications.

In the last year 497 thyroid operations were performed in our institution, where 77 cases (15.5%) were asymptomatic incidentalomas. The positivity of ultrasonography was 100%, but the scintigraphy showed only in 20 cases (25.9%) “cold“-nodule. The MIBI was in 6.5% positive. More than 70% of the cases were the nodules smaller than 3cm and the lesion was in 50.6% uninodular. During the diagnostic process in 41 cases ultrasonography guided aspiration and cytology was performed. The indication for surgery was based on the suspicion of malignancy in 60% of these cases. Mostly lobectomy or thyroidectomy was performed. The definitive histological diagnosis was in 5 cases (6.5%) papillary carcinoma. Postoperative complication occurred in 1 patient (1.29%), she underwent a re-operation because of bleeding.

In conclusion, the prevalence of the thyroid incidentaloma is increasing. During the diagnostic procedures our aim must be to detect the malignant or the suspicious lesions. The ultrasonographic signs for malignancy and the result of the cytology must be the basis of indication for surgery. The definitive operational treatment suggested in consideration of the low rate of complications.
TWIN STUDY ON THE HERITABILITY OF THE MOST COMMON SURGICAL DISORDERS

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Introduction: Although appendectomy, cholecystectomy or tonsillectomy are common surgical disorders but their etiologies are still unclear. Twin studies by comparing identical with non-identical twins produce information on the relative contribution of genes and environment.

Methods: 166 Hungarian and 50 American adult twin pairs (154 monozygotic, 62 dizygotic; 110 males, 322 females; age 43.4±16.8 years±standard deviation) completed a questionnaire concerning the history of surgeries. Heritability was calculated as the following ratio: H = [(MZconc% − DZconc%)] / [1.00 − (DZconc%)] where MZconc% indicates the concordance of monozygotic twins in percentage and DZconc% indicates the concordance of dizygotic twins in percentage. Statistical analysis was performed by SPSS Statistics 17.

Results: The overall rate of tonsillectomy, colorectal surgery, appendectomy, cholecystectomy, varicectomy and hernia surgery was 39.8%, 2.1%, 10.2%, 6.9%, 3.0% and 4.9%. The history of operation (any kind) showed no genetic determinacy. No role for genetic influence was found concerning tonsillectomy, appendectomy, varicectomy and hernia surgery. The heritability for cholecystectomy was 14% and 33.3% for colorectal surgery.

Conclusions: No genetic influence but entirely environmental factors determinate the history of tonsillectomy, colorectal surgery, appendectomy, cholecystectomy, varicectomy and hernia surgery. Low heritability was estimated for cholecystectomy and colorectal surgery. Limitations due to sample size must be taken into account.
THE DATABASE OF HUNGARIAN SCHOLARLY WORKS – A NEW BIBLIOMETRIC TOOL

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Formerly existing as paper collections, later the different universities established their own publication online database, individually, which were very exact – but every database had its own valuable specificity, different software solutions. One had more publication types (books, notes, etc.) the others were dealing only with journal publications, some of them contained the full text, however none of them included citations (similar to WoS, Scopus, or Google Scholar).

In 2009 a brand new scholarly database started for the universities, and research institutions based on the database of Hungarian Academy of Sciences. The staff’s scientific productivity is currently being uploaded. This database contains not only the different kinds of publications, but also the citations (from WoS, Scopus, Google scholar).

The output from this database can show the persons’ scientific activity, and the productivity of different institutions.
MECHANICAL CIRCULATORY SUPPORT IN CHILDREN - EARLY EXPERIENCE IN HUNGARY

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Long term mechanical circulatory support in childhood has been established in 5 cases in Hungary. Between 29 Sep 2008 and 08 Dec 2010 assist device therapy was performed in 3 boys and 2 girls, 2 with BiVAD, 3 with LVAD. The mean age was 36 months (12-69) and the mean body weight was 12 kg (8-19). Berlin Heart® Excor® with Ikus® drive was used. Bridge-to-bridge mechanical assistance was used prior 1 BiVAD and 1 LVAD. In one LVAD pt. the right heart was paced with permanent dual chamber system. Only oral medication was given to support in the long run. Data collection was retrospective in 3 cases, retrospective and prospective in 2. The device recorded data were also evaluated. Student t test was used for statistical analysis. The mean duration of BiVAD and LVAD was 108±107.5 (32-184) and 181±79.7 (105-264) days, respectively, the difference is not significant (p=0.25); mean cardiac index was 2.8±0.9 (2.2-3.5) and 2.8±0.5 (2.3-3.2) l/min/m², respectively with no significant difference (p=0.5). No clinical parameter showed right heart failure during LVAD therapy. The left sided pump filling was incomplete in 3±4.6‰ (0-7) and 6±4.1‰ (2-10) at the BiVAD and LVAD therapies, respectively, the difference is not significant (p=0.26). No „suction” phenomena of the left ventricular cannula was observed in the LVAD group. During LVAD treatment the right ventricle has to maintain the whole pulmonary blood flow to keep the circulation in balance. Long term mechanical circulatory support with single left sided pump can only be successful if the right heart can cope for weeks, even months with additional oral medication support at most. Our results indicate that LVAD therapy was the right decision in our patients when at the time of implantation the right heart function made it appropriate.
P2-8
LAPAROSCOPIC RESECTION OF GASTRIC GASTROINTESTINAL STROMAL TUMORS

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Gastrointestinal stromal tumors (GIST) are the most common mesenchymal tumors of the gastrointestinal tract containing spindle or epitheloid cells that mark positive for kit protein (CD 117). They present <3% of all GI tumors. Most frequently, they are solitary, well-circumscribed tumors with a pseudocapsule. Approximately 70% occur in the stomach, 20% in the small intestine, and 10% elsewhere in the GI tract (rectum, omentum, and peritoneum).

In 2001, Fletcher reported that the prognosis of these tumors is determined by the size and the mitotic count per 50 high-power fields (HPF) examined.

Surgical resection is the treatment of choice and, because these tumors lack a true capsule, en bloc resection with wide adjacent margins must be done. Lymph node resection is not indicated.

The feasibility of minimally invasive resection of gastric GIST has been established, complete resection of gastric GISTs using a combination of laparoscopic or laparoendoscopic techniques results in low perioperative morbidity and an effective long-term control of the disease.

In our department between January 2003 and June 2012, 16 patients underwent local and segmental gastric resections with laparoscopic technique.

In laparoscopic group mean tumor size was 4 cm (range, 2-10 cm) with the majority of the lesions located in the proximal stomach. Mean operative time was 120 minutes (range, 35-220 minutes), and the mean length of hospitalization was 6 days (range 4-10 days). There were no major perioperative complications or mortalities. All lesions had negative resection margins. At follow-up 14 (100%) patients were disease free.

A laparoscopic approach to surgical resection of gastric GIST is associated with low morbidity and short hospitalization. The laparoscopic approach may be the preferred resection technique in most patients with small- and medium-sized gastric GISTs.
P2-9

RETROSPECTIVE ANALYSIS OF LAPAROSCOPIC PROXIMAL GASTRECTOMY FOR GASTRIC CANCER

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Purpose: To analyze our surgical results of laparoscopic gastrectomy in our department.

Methods: We analyzed retrospectively the gastric cancer patients who underwent laparoscopic proximal gastrectomy from October 2004 to December 2011.

Results: Out of 255 who underwent laparoscopic gastrectomy, 23 patients (9%) were performed with proximal gastrectomy. Age;66(43-79), BMI;22.7(16.6-27.4), M:F;18:5. We reconstructed using esophago-gastrostomy for all patients. We used intracorporeal anastomosis using linear stapler for 7 patients. We performed D1, D1+alpha, and D1+beta lymph node dissection for 1, 3, and 19 patients, respectively and the mean number of dissected lymph node was 21.9. We separated these patients into two groups according to the period of surgery. Early phase group (EG) from 2004 to 2007 were 12 and late phase group (LG) from 2008 to 2011 were 11. Mean operation time of EG and LG were 466.4 and 419.2 min. Mean blood loss of EG and LG were 235g and 255g. Mean postoperative stay of EG and LG were 20.4 and 15.9 days.

Conclusion: We found improvement of short-term surgical results with accumulation of experience. We need further analysis of long-term results and comparison with results of total gastrectomy.
P2-10
LESS THAN 4 METASTATIC LYMPH NODES LOCALIZED AT THE SUPERFICIAL AREA OF AXILLARY REGION IN THE PATIENTS WITH EARLY BREAST CANCER

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Introduction: Recently, for the patients with cN+, feasibility of sentinel lymph nodes biopsy (SLNB) has been discussed. In fact, standard axillary LNs dissection (ALND) is still recommended for macro metastasis in the axillary. To develop minimal invasive ALND, we analysed the mapping of metastatic LNs in the pts with early breast cancer.

Methods: We analyzed two cohorts. In cohort A, all pts received standard ALND were eligible. In cohort B, SLNs were evaluated by SPECT-CT and positive LNs were detected by SLNB. Based on AJCC classification, anatomical extent of axillary LNs included level 1 and II. We divided level I into two distinct areas, which included superficial area (level Is) and deep area (level Id).

Results: Among cohort A, 54 (38.6%) of 140 pts had positive LNs in the axillary. Out of 54, 22 pts had less than 3 positive nodes (Group A-1), otherwise, 30 pts had more than 4 positive nodes in the axillary (Group A-2). In the group A-1, all positive nodes were detected in only level Is. Out of 30, 2 had positive nodes in both level Is and level II. In the group B, there were 30 of 100 pts had positive nodes in the axillary. All SNLs were localized in level Is and the average number of SLNs resected were 1.33. Based on pathological reports, 13 had positive nodes in only level Is and out of 13, 3 had positive nodes in both level Is and level Id. Seven had positive nodes in level Is and level II. Ten had positive nodes in level Is, level Id and level II. There were no pts with positive nodes localized in only level Id.

Conclusion: The incidence of LNs metastasis in the level Id of the axillary region was low in the pts with clinical node negative. We may avoid LNs dissection to the level Id area in the pts with clinical nodes negative.
P3-1

CORRELATION OF CLINICAL FINDINGS AND COMPLEMENTARY TESTS IN PATIENTS STUDIED BY GASTROESOPHAGEAL REFLUX DISEASE

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Introduction: The aim of this study is verify by comprehensive clinical study of patients with gastroesophageal reflux disease (GERD) investigated by functional-24 hours pH-metry, manometry-, endoscopic, including the pathological examination and radiological studies, for assessing what degree of correlation can be found between clinical findings and diagnostic tests of esophageal function, depending on the degree of organ involvement of these patients.

Methods: After the exclusions we studied a number of 143 patients, well investigated during 5 years. Compare the clinical variables and functional outcomes, we divided the patients according to the DeMeester score in two groups: patients with and without reflux.

Results: Variables such as LES (lower esophageal sphincter) pressure and DeMeester score have a weak statistically significant relationship. Between Barrett (risk group is male) and DeMeester score we found a statistically significant difference. The most pathological categories of shortening of the LES are more often associated with severe grades of esophagitis. If we know the primary symptom, at least with 13.7% more security can we predict the existence of the reflux. Multifaceted symptomatology in patients labeled reflux patients is lower than seen in patients without reflux. The traditionally accepted histological markers of GERD do not correlate with the results of 24 hours pH monitoring. Helicobacter pylori infection is lower in patients with GERD (possible protective effect of the bacteria). Body Mass Index (BMI) less favorable is more often associated with GERD.

Conclusion: In GERD there is no association between symptom severity and frequency of the presence or absence of mucosal inflammation. It was unable to establish the role of associated symptoms or congruent symptom patterns as predictors of GERD. Increasingly powerful receiver operating characteristic (ROC) curves for decision making can provide more reliable results to the diagnosis of the reflux disease. They argue and express mathematically the degree of intensity of the associations between clinical findings and complementary tests related to the diagnosis and prognosis of GERD and Barrett’s esophagus.
P3-2

AORTIC RUPTURE RELATED DEATHS BETWEEN 1993 AND 2007, ANALYSIS OF DATA FROM ARCHIVES OF SEMMELWEIS UNIVERSITY

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Objective: Data from Archives of Semmelweis University, Institute of Forensic Medicine, 1st. and 2nd Department of Pathology were analysed. Case history and autopsy of patients died due to aortic rupture (AR) in Budapest between 1993 and 2007 were evaluated. Patients who died in public premises, in an ambulance car, before or following medical treatment within 72 hours were involved in our study.

Methods: From 58243 autopsies were reviewed in a 15 years long period, 307 patient died due to aortic rupture. The detailed statistical analysis contains data on age, gender, yearly and seasonal distribution, type and anatomical location of rupture, medical history, type of medical attendance.

Results: 66% of AR patients related to aortic aneurysm rupture (RAA) and 34% aortic dissection (34%). The mean age was 66.2 ± 13.7 years. Male/female ratio was 7:3. 68% of patients died in hospitals. 82% of RAA, but only 54% of AD patients were treated at cardiac or vascular surgical departments. In RAA group the rupture involved thoracic segment in 33%, abdominal tract in 65% and thoraco-abdominal part of the aorta in 2% of cases. In group AD 77 % of dissection were classified as Stanford A, and 23 % as Stanford B. 11% of RAA cases were post-dissection aneurysms. In RAA group the patients died 55% preoperatively, 13% intra-operatively, and 32% postoperatively. In AD group these ratios were 72% preoperatively, 14% intra-operatively and 14% postoperatively. The main direction of rupture was retroperitoneal space in RAA group (49%) and pericardium in AD group (66%).

Conclusions: 30% of patients died before the hospitalisation. Only 51% of AR was correctly diagnosed during the primary care. 45 % of patients in RAA group, and 28% of in AD group received vascular intervention. The importance of expeditious recognition of non specific thoracic and abdominal clinical symptoms should be emphasized. Adequate surgical or endovascular intervention based on forthwith radiological examinations is able to raise survival rate of AR patients. Regular follow-up visits of patients with known aortic dissection could decrease the risk of fatal ARs.
P3-3

LESSONS FROM OUR EVARS IN THE FIRST TEN YEARS

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From the first case in February 2002 to July 2012 we attempted 81 and completed 79 stent-graft implantations due to abdominal aortic aneurysm (AAA). The average age of the 75 male and 6 female patients was 75.3 years. Every time the aneurysms were infrarenal. The indication was primary aneurysm in all but one case where a pseudoaneurysm after aorto-aortic interposition was treated. All the procedures were elective and we implanted bifurcational grafts in all cases except for two times. Once in an aneurysm affecting the iliac bifurcation we also deployed a branched graft.

Twenty three patients died during the follow-up period, two of them in the early postoperative course. Reintervention was necessary in three patients due to type I. endoleak and once because of type II. endoleak. We found type III. endoleak in one case who did not undergo reintervention. Primary conversion was necessary three times (3.7%), we could not advance the device in two cases and the aneurysm ruptured once during deployment. Early graft occlusion happened five times while we found the graft blocked in two cases more than one month after the operation. We investigated the possible reasons of the high incidence of graft occlusion. We experienced significant migration in one patient who needed reoperation.

The aims of this presentation were to demonstrate the entire EVAR practice of a single center and compare our results to the data of relevant international studies and registries. In accordance to our experience we also aimed to put questions about managing AAA patients like general and special indications of EVAR, conditions of emergency EVAR, surgical options of juxtarenal aneurysms and treatment strategy of common iliac artery aneurysms besides AAA.
INCIDENCE OF SURGICAL COMPLICATIONS IN HCV OR HBV INFECTED KIDNEY TRANSPLANTED PATIENTS

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Introduction: Although the incidence of HBV and HCV infection of the kidney transplanted patients has decreased in the last years, it is still an important influencing factor in the survival of kidney transplanted patients. There are hepatic and extrahepatic manifestations of the disease and the availability of therapeutic facilities is limited.

Methods: At our Department 85 HBV and/or HCV infected kidney transplanted patients were detected in the last 15 years. There were 30 women, 35 men. Their average age at the time of surgical intervention was 53,1 years and the average time since kidney transplantation was 10,52 years. After the kidney transplantation 68 operations were performed in 48 patients. In 6 patients the transplanted kidney was removed, 12 patients were operated because of solid organ tumour and 6 patients because of skin malignancies. Thirteen patients had cholecystectomy, three patients underwent hysterectomy, three had vascular surgery and 25 other surgical operations were carried out. We analysed the postoperative complications.

Results: Out of the 68 operations we experienced 14 postoperative complications (20,58%). Three patients had postoperative bleeding and haematoma, three had biliary complications-biloma, biliary leak-, three of them developed septic complications and wound healing disturbances. In three patients postoperative hernia developed. We diagnosed one mechanic ileus and one patient had anastomosis insufficiency after rectum tumour resection. None of the complications caused the patient’s death and all patients recovered after the surgical complications.

Conclusion: The hepatitis B and/or C virus status has a great influence on the long term patient and graft survival of kidney transplanted patients. These patients had a complication rate of 20,58% after surgery.
P3-5

CHANGES OF PROGESTERONE-INDUCED BLOCKING FACTOR IN PATIENTS AFTER KIDNEY TRANSPLANTATION

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The prediction of graft rejection can play an important part in graft survival. Analysis of immune reactions has shown that graft rejection shares mechanisms with recurrent abortions during pregnancy. Progesterone-induced blocking factor (PIBF), a mediator of progesterone that blocks natural killer cell activity in peripheral blood, produces antiabortive effects. The aim of this study was to examine the PIBF concentration in the urine of transplanted recipients.

The study included 116 white adults (70 men and 46 women) of median age 49.3 years, who had undergone kidney transplantations. The median duration after transplantation was 3.46 years. The average period between renal disease and our measurement was 12.3 years, and the median interval between graft rejection and our study was 1.75 years. Urine samples were used to measure PIBF concentrations by an enzyme-linked immunsorbent assay.

PIBF urinary concentrations decreased significantly in patients who experienced 1 or more rejection episodes (31.8 ± 2.2 ng/mL) compared with those without any episode (22.7 ± 1.2 ng/mL; P > .01). Moreover, the urinary PIBF level was significantly lower among patients who had increased creatinine and urea nitrogen levels in blood samples (P > .05 and P > .01, respectively). Decreased PIBF values in kidney transplant patients followed previous rejection episodes. A close negative correlation was observed between urinary PIBF concentrations and blood levels of creatinine and urea nitrogen.

These findings suggested that PIBF detection may predict graft rejection in transplant recipients.
**P3-6**

**OCCURENCE OF HEPATITIS B AND HEPATITS C INFECTION IN KIDNEY TRANSPLANTED PATIENTS**

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**Introduction:** In solid organ transplantation chronic viral hepatitis C (HCV) and B (HBV) is a major factor for morbidity and mortality. The aim of the study was to evaluate the influence of HBV and HCV on the short and long term patient’s and graft survival in kidney transplanted patients and to evaluate the influence of different immunosuppressive regimes.

**Methods:** We included all patients who were diagnosed with either HBV or HCV or with a co-infection of both viruses at any time prior or post transplant. Viral reactivation was determined over time by liver serology using AST/ALT ratio (De Ritis quotient). The graft function was determined biochemically using the CKD-EPI formula for glomerular filtration rate. 85 HBV and/or HCV infected kidney transplanted patients were included. According to the basis immunosuppressive treatment patient were divided into two groups: Cyclosporin treated (42 patients) and Prograf, Advagraf treated (43 patients). We analysed the relationship of the immunosuppression and the graft and patient’s survival, liver function, incidence of tumour occurrence.

**Results:** 42 patients (49.41%) were treated with Sandimmun Neoral and 43 patients (50.59%) with Prograf or Advagraf. Patients treated with Cyclosporin had a slightly better kidney function, serum creatinine was 10 μmol/l better in average than in patients treated with Prograf. We calculated the de Ritis quotient in each patient. (De-Ritis-Quotient = AST/ALT (GOT/GPT) No significant difference was found in the de Ritis quotient regarding the type of virus and immunosuppressive treatment.

In the Sandimmun Neoral group six patients (14.3%) died, six had to return to dialysis (14.3 %) and 7 patients (16.6%) had tumour. The average graft survival was 13,02 ±4,74 years.

In the Prograf group 5 patients (9.5%) died, 7 patients (16.27%) returned to dialysis and 4 patients (9.32 %) had tumour. The graft survival was 9,88±5,86 years. HBV infected patients had a better kidney graft function, but more patients had to return to dialysis out of this group, than from the hepatitis C infected patients. (32% vs. 14.7%).

**Conclusion:** Hepatitis B and C infection has an influence on the graft and patients survival. In our analysis we found a longer graft survival in the Cyclosporin treated group versus Prograf group. The incidence of tumour was higher in the Sandimmun group. Prospective, randomized studies are needed for the detection of the liver disease progression and for the decision of the best immunosuppressive treatment.
HARMFUL OR HARMLESS? BOTANICALS AS FOODS CAN CAUSE CONCERNS DURING SURGICAL INTERVENTIONS

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The use of herbal remedies has increased in both western and eastern societies. The World Health Organization (WHO) estimates that up to 80% of the world’s population still depends on herbal medicines.

The assumption by patients and healthcare professionals that these products are ‘natural’ and therefore safe is clearly dangerous. Potential complications of all herbal medications may stem from toxicity due to overdose, contamination by other plants, misidentified plants, drug-herb interactions, and physiological changes. Many patients do not disclose their use and hence the anaesthetists and surgeons may remain oblivious to potential side-effects and drug interactions. As pharmacokinetic and pharmacodynamic data are lacking, the American Society of Anaesthesiologists recommends that patients discontinue the use of herbal medications 2–3 weeks before surgery. According to the present knowledge there is no Hungarian recommendation in this field.

It is important to emphasize that in the European Community two forms of herbs are available for consumers: 1) traditional herbal medicinal products regulated by the medicinal products’ law, 2) food supplements that are under the scope of food law. Food supplements can be marketed without preliminary authorization; consumers can obtain and consume them without any medical supervision during a long period of time. In Hungary only an obligatory notification system exists prior to placing the product on the market. Since 2004 more than ten thousands food supplement notifications have been filed in Hungary at the National Institute for Food and Nutrition Science (NIFNS). Many of these products contain botanicals or botanical preparations.

The aim of this presentation is to discuss the more commonly used botanicals, their effects on the conduct of anaesthesia and surgical intervention. These include echinacea, ephedra (Ephedra sinica), garlic, ginger, Ginkgo biloba, ginseng, kava (Piper methysticum), St John’s Wort (Hypericum perforatum), valerian (Valeriana officinalis) and herbal diuretics like dandelion, goldenseal (Hydrastis canadensis), saw palmetto (Serenoa repens) berries and spearmint.
P3-8

CONNECTIONS AMONG HEALTH STATUS FOREBODING SURGICAL INTERVENTION, NUTRITIONAL STATUS, AND DIETARY HABITS IN HUNGARIAN POPULATION BASED ON THE DATA OF HUNGARIAN DIET AND NUTRITIONAL STATUS SURVEY 2009

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In 2009 the National Institute for Food and Nutrition Science performed a dietary survey in order to investigate the nutritional status and dietary habits of the Hungarian population. The survey for adults of age ≥18 y consisted of a self-reported questionnaire on health status, a three-day dietary record and the anthropometric data (body weight, body height, waist circumference) measured by a trained professional using validated instruments. Two-stage, stratified sampling method was used. Data of 1165 persons were analyzed with the final sample being representative of the adult population by age and gender. For the present analysis those persons were chosen who had been diagnosed with one of the following diseases in the previous year (with the prevalence indicated in brackets): infarctus myocardii (7.7%), angina pectoris (4.6%), hypertension (33.4%), stroke (2.7%), diabetes mellitus (8.4%), ulcus ventriculi (8.5%), cirrhosis hepatitis (1.1%), malignant tumour (4.1%), hypercholesterinaemia (13.7%). These alterations can be linked to surgical interventions as arteria carotis interna reconstruction, surgical attendance of gastro-duodenal perforations, resections and extirpations due to tumours, etc. Prevalence of obesity (BMI: 25.0-29.9 kg/m²) and overweight (BMI ≥30 kg/m²) were higher among patients diagnosed than healthy subjects. In some cases (infarctus myocardii, angina pectoris, hypertension, malignant tumour, and hypercholesterinaemia) the differences were significant. In spite of frequent occurrence of obesity and overweight dietary energy intakes were significantly lower in diagnosed patients than in healthy subjects showing that as a result of the diagnosis of a chronic illness, persons have started to change their dietary habits but in the prevalence of obesity and overweight it could not be detected yet. Significant alterations in nutrient intake were observed in stroke, hypertension, malignant tumour, most frequently lower intakes of fat and saturated fatty acids compared to the healthy group were detected. These data indicate that diagnosis of a chronic illness foreboding surgical intervention results in a favourable change of dietary habits and nutrient intake among patients, however high prevalence of obesity and overweight can still be expected that have a significant impact on the success of the surgical intervention and anesthesia.
P4-1

MINIMAL INVASIVE SURGICAL AND ENDOSCOPIC TREATMENT OF THE UPSIDE DOWN STOMACH

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Introduction: Upside down stomach sometimes is asymptomatic in adults, but sometimes it can cause regurgitation, vomiting, and weight loss. This condition has an incidence increasing with age thus increasing the risk of surgical intervention.

Case Reports: A 90 year old man was admitted with dysphagia, postprandial regurgitation, and an 18 kg weight loss in the past year. Gastroscopy revealed a significantly dilated, cranky esophagus and an upside down stomach. The diagnosis was confirmed by a barium swallow and computed tomography. The stomach was repositioned with a gastroscope using insufflation and an a-loop maneuver under fluoroscopic guidance. A percutaneous endoscopic gastrostomy tube was then inserted to fix the stomach. The patient was discharged on the first postinterventional day. He gained 6 kg in the next 2 months.
A 89 year old man was admitted to the hospital with similar symptoms. The examinations confirmed upside down stomach. The stomach was repositioned on the same way. He gained 7 kg in 6 weeks, and started oral feeding.

Discussion: High-risk patients with upside-down stomach can be managed by endoscopic repositioning of the stomach and percutaneous endoscopic gastrostomy fixation. This is a useful alternative therapeutic intervention. There have been 14 similar cases being reported in the literature.
SURGICAL TREATMENT OF INTRAOPERATIVE INTUBATION BRONCHUS INJURIES

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We perform operations by thoracotomy or VATS technique exclusively in isolated intubation anaesthesia. During the operations the patients is respirated through a double lumen tube thus excluding the operated lung. In the case of course of intubation and operation bronchus injury might occur in the case of the most careful anaesthesiological technique.

We performed 1625 thoracic surgical interventions by VATS technique and thoracotomy in our department between 1995-2011. The operations were performed in isolated intubation anaesthesia. After intubation the positions of the tube was checked in every case by auscultation or fiberscope.

In our presentation we are going to talk about four different bronchus injuries which were caused by double lumen tube.

In the first case the cuff of the tube disrupted the pars membranacea in the middle part of the trachea. In the second case the suction catheter perforated the bronchus of the right lower lobe. In the third case the end of the tube perforated the pars membranacea of the intermedier bronchus. In the fourth case the suction catheter which was not completely removed, was closed into the suture line.

In the first three cases the bronchus injuries were noticed in the course of waterprobe. In all the three cases the affected parts of bronchus were dissected then the injuries were closed with unabsorbable running suture. The suction catheter closed into the suture line of the left main bronchus was freed by removing the clamps then the left main bronchus was mobilised to the tracheal bifurcation and closed according to Overholt. In the postoperative period we did not register any significant airleakage. The patients recovered without any complications.

The anaesthesia of the thoracic surgeries is a routine procedure however complications might occur one of which is tube inflicted bronchus injuries which are the most dangerous for the surgeon. Noticing the injury very important especially in the case of VATS procedures. After diagnosing the bronchus injury with the appropriate surgical technique the injury can be repaired and the patient can recover without any complications.
P4-3

A CASE OF HEALING SEVERE DUMPING SYNDROME AFTER DISTAL GASTRECTOMY BY CHANGING RECONSTRUCTION FROM BILLROTH II TO PHYSIOLOGICAL POUCH INTERPOSITION

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This is a case of a 42-year-old male who recovered from a severe dumping syndrome after distal gastrectomy by changing the reconstruction method from Billroth II to physiological pouch interposition. He went through distal gastrectomy due to duodenal ulcer at the age of 22. After the operation, he suffered from severe anastomotic ulcer and post-gastrectomy anorexia, epigastralgia, diarrhea, and hypoglycemia. This allowed him to only have liquid diet. We performed a gastric reconstruction using physiological pouch interposition. His symptoms and quality of life improved a year after the reconstruction. Our physiological pouch interposition preserving the angle of His and fornix is a fine way to improve post-operative quality of life of a patient after gastrectomy. Furthermore, it can be modified from a nonphysiological reconstruction method.
RARE ESOPHAGEAL MALIGNANCY: A CASE OF MALIGNANT MELANOMA

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Malignant melanoma of the esophagus is a rare disease, accounting for only 0.1% of primary esophageal malignant neoplasms. More than a hundred cases of primary malignant melanoma of the esophagus have been reported. Metastatic involvement of the esophagus was first reported in a postmortem study in 1895. Since then, only few cases of metastatic malignant melanoma of the esophagus detected clinically have been reported, although it has been found in up to 4% of postmortem studies of malignant melanoma metastatic to the gastrointestinal tract. We report a case of symptomatic metastatic malignant melanoma of the esophagus managed with transhiatal oesophagectomy.
RETROPERITONEAL LIPOSARCOMA, 11 YEARS SURVIVAL AFTER 8 OPERATIONS: A CASE REPORT

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Liposarcoma is the most common soft tissue sarcoma in adults, but it is only 0.1% of the malignant tumors. Usually it appears like a slowly enlarging, painless abdominal mass with no other symptoms. The most common predilection place is the retroperitoneum. The gold-standard in the treatment of liposarcomas is the complete surgical resection, although the recurrence of the tumor is very high (60%). Multimodality treatment: chemotherapy and radiation is also used.

A 63 years old male patient was admitted to our hospital in 2001 with abdominal discomfort and palpable mass. Previously he underwent an operation in another hospital, where they found a retroperitoneal liposarcoma which they opined irresectable. Two months later, in October 2001 we removed a tumor of 15 kilograms from the capsule of the right kidney. Between December 2001 and July 2002 the patient underwent 6 series of chemotherapy (CED schema) and 60 Gy telecobalt radiation in the Department of Oncology in Uzsoki Hospital, Budapest. Afterwards we performed 6 operations altogether, because of the recurrence of the tumor: right nephrectomy, adrenalectomy and hemicolecctomy in October 2003, cholecystectomy in July 2007, tumorexstirpation in November 2008, March 2010 and May 2011, and tumorexstirpation and left hemicastration in January 2012. At the beginning the histological type of the tumor was well differentiated liposarcoma with myxoid, pleiomorph structures, later it became dedifferentiated, and at the end it turned to a well differentiated, low grade tumor, which is contradictory with the well known up-grading found in the literature. The liposarcomas are difficult to be investigated because of their rare occurrence and heterogenic clinical signs and histological types. Despite the development of the chemotherapy, the only solution in the treatment of the liposarcomas is the wide surgical excision, which plays an important part in the long term survival and the quality of life.
A CASE OF CHANGING RECONSTRUCTION FROM ROUX-EN-Y TO PHYSIOLOGICAL POUCH INTERPOSITION AFTER TOTAL GASTRECTOMY FOR THE RESIDUAL GASTRIC CANCER

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This is a case of a 70-year-old male who changed the reconstruction method from Roux-en-Y to physiological pouch interposition after total gastrectomy due to residual gastric cancer. Distal gastrectomy using Roux-en-Y reconstruction was done due to gastric cancer, three months ago. Total gastrectomy was necessary because the proximal stump of the dissected specimen was focally positive. We performed a gastric reconstruction using physiological pouch interposition, which improved the quality of life of the patient after total gastrectomy. Our physiological pouch interposition with Hisoid angle and pseudo-fornix is a fine way to improve post-operative quality of life of a patient after total gastrectomy. Furthermore, it can be modified from a nonphysiological reconstruction method after distal gastrectomy.
LAPAROSCOPIC TREATMENT OF MEDIAN ARCULATE LIGAMENT SYNDROME – A CASE REPORT

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Introduction: Celiac trunc compression (also known as Median Arcuate Ligament Syndrome - MALS) has been described first in 1960 and is responsible for few percent of chronic abdominal pain. The most common symptoms are nausea, epigastric pain may be related to meals or body position, and may be accompanied by weight loss as well. Treatment of MALS is generally surgical, means decompression of the celiac artery either by open or laparoscopic surgical approach.

Case report: a 34-year old woman had postpandrial abdominal pain for years. During the course of examination lactose intolerance and hiatus hernia was diagnosed. Conservative treatment was ineffective. CTA (CT Angiography) and DSA (Digital Substruction Angiography) was performed and showed significant celiac trunc stenosis. PTA (Percutaneous Transluminal Angioplasty) was unsuccessful as extravasal mechanical compression was present, therefore laparoscopic decompression was carried out. The postoperative CTA showed normal blood flow and the patient’s complaints elapsed.

Discussion: Laparoscopic surgery is safe and low expense method for celiac artery decompression, however sometimes it is difficult to reveal the exact reason and thus setting up the proper operating plan.
TREATMENT OF IATROGENIC DUODENAL PERFORATION POST – ERCP

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Aims: The post-ERCP duodenal injury is a rare, but life threatening complication. There are many methods for the surgical treatment. The authors discuss their experiences.

Patients and methods: In case of small subclinical injuries conservative treatment is suggested. Four patients were treated with conservative therapy (antibiotics, parenteral feeding). Five patients with severe duodenal injuries with retroperitoneal fluid and/or air collection, and/or peritonitis were operated on. Suture of the duodenum and T-tube drainage were performed in these cases.

Results: All the patients with conservative therapy recovered. One of the operated patients died.

Conclusions: The early diagnosis is important in post-ERCP duodenal injuries. The conservative treatment is safe in minor injuries. The surgery is immediately indicated in cases with major injuries and sepsis.
P4-9

LAPAROSCOPIC ADRENALECTOMY AND HIATUS HERNIA REPAIR IN ONE SITTING

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The minimal invasive surgical intervention is accepted, safe and primary choice for adrenalectomy of benign lesions and for hiatus hernia repair. The advantage of laparoscopy is undoubted: faster wound healing and recovery, less intraoperative blood loss and postoperative pain, better cosmetic result. Between January 2007 and April 2012 we made 43 laparoscopic adrenalectomy and 42 laparoscopic hiatus hernia repair with fundoplication in our department. All adrenalectomy patients underwent endocrinological work-up. Indications for surgery were Cushing and Conn syndrome. Authors present a case of a 61 years old female, whose preoperative exams showed Cushing syndrome and a left suprarenal gland adenoma with a size of 47x26x45mm. Abdominal CT scan justified an axial hiatus hernia as well. During surgery a hiatus hernia with a diameter of 6cm, in which the gastric fundus was found at the posterior mediastinum. We decided to make a laparoscopic hernia repair with adrenalectomy in one sitting. Patient had no complications during the postoperative period and she was recommended for further endocrinological treatment. This case was found to be interesting as two conditions were solved in one sitting with the help of laparoscopy.
P4-10

PANCREATIC TUMOR AND MID-GUT MALROTATION: A CASE REPORT

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Mid-gut malrotation is defined as developmental anomaly which may be associated with absence of distal parts of the superior mesenteric artery. In this situation the role of the pancreaticoduodenal arcad is very important.

A 49 years old woman was admitted to our department in 2006 with obstructive jaundice. A tumor of 2 cms in diameter located in the head of the pancreas was diagnosed preoperatively. Malrotation or other developmental anomaly was not revealed previously. A Whipple procedure was performed. During the laparotomy several typical signs of mid-gut malrotation were founded: right-sided duodenal jejunal junction, left positioned coecum, inverted position of the superior mesenteric vein. In the postoperative period two reoperations were necessary due to the necrosis of the upper tract of the small bowel. The patient died 28 days after the procedure. At autopsy an almost entire congenital stricture of the SMA was revealed. The ligature and the cutting of the gastroduodenal artery and the pancreaticoduodenal arcade during the Whipple procedure impaired the blood supply of this region and the compensation retrogradely from the right colic artery was not enough.

Although the mid-gut malrotation and the pancreatic tumor together occure very rarely, the current case shows that the impaired blood supply of the upper tract of the small bowel after a resection procedure may lead to death because of the ischemic complications.
P4-11

LAPAROSCOPIC RESECTION OF PANCREAS TAIL TUMOR – CASE REPORT

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Introduction: Successfull case of a laparoscopic pancreas body and tail resection because of a cystic tumour.

Patient and Method: A 16 year old woman with abdominal discomfort and tactile abdominal mass in the left-upper abdominal region. CT scan showed a cystic tumour in the body and the tail of the pancreas. The diameter of the mass was 9 cms. Laparoscopic pancreas body and tail resection was performed saving the spleen and its vessels

Result: Uncomplicated postoperative period. Antibiotic prophylaxis was performed. In the 5th postoperative day she left the hospital. Histological examination showed neuroendocrine tumour. Oncotherapy was not necessary.

Conclusion: In selected cases of laparoscopic pancreatic body and tail removal is recommended to perform safely with all advantages of the laparoscopy.
P4-12

SPONTANEOUS RUPTURE OF THE RECTOSIGMOID WITH EVISCERATION OF THE SMALL BOWELS THROUGH THE ANUS

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57-year-old man appeared in the hospital with severe abdominal pain and protrusion of the small bowels through the anal orifice. He had a past history of rectal prolapse for many years but otherwise was fit and well, with good vital signs. After the necessary examinations an emergency laparotomy was performed; the reposition of the small bowel loops through the rectal tear and suturing of the rectosigmoid were carried out and a sigmoid colostomy was made to protect the integrity of the rectal suture line. Case report of an extreme rarity in the literature.
P5-1

3D MOTION TRACKING FOR LAPAROSCOPIC SURGICAL SKILL ASSESSMENT

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Background: Minimally invasive, laparoscopic surgery requires highly skilled physicians with a solid theoretical background and a significant amount of practice. Pelvi trainers are widely employed, since they provide a good means for practicing and developing laparoscopic skills. The Apollo laparoscopic box trainer – developed at our universities – represents a useful and affordable solution for developing specific skills.

Purpose: The usefulness of a surgical simulator has to be evaluated through the accuracy of the tasks taught and the correctness of surgical movements. Optimal development of the individual’s skill advancement has to be validated by performing several measurements.

Methods: The objective evaluation of surgical skills is possible through 3D optical tracking, by measuring the spatial location of both the experimental setup and the trainee. Reflective markers were anchored on the subjects, and the motions recorded from several angles with CCD cameras. Markers were also placed on the trainer box, the laparoscopic instruments and on fixed reference points. Our subjects performed the FLS peg transfer, and the data was analyzed using the APAS (Ariel Performance Analysis System) software system which provides objective biomechanical data from the recorded data.

Conclusion: The measurements performed with the tracking system provide an objective means to test the subjects’ surgical abilities. By analyzing several aspects of their movements during laparoscopic exercises, we will gain important data on individual performance and metrics. This optimized setup will be used for large scale, clinically relevant data collection.
P5-2

CORRELATION BETWEEN HUMAN GALLSTONE INFECTION AND TISSUE REACTION GENERATED BY LOST STONES – EXPERIMENTAL DATA

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Background: Laparoscopic cholecystectomy (LC) became the standard technique for the removal of the gallbladder containing stones. During the surgical procedure the mechanical perforation of the gallbladder can occur, which results in loosing of some of the gallstones in the abdominal cavity. The aim of this study is to detect the behavior of the different types of the lost gallstones and to examine the effect of topically applied antibiotic lavage.

Methods: In this study 75 Wistar rats were used. Following median laparotomy human sterile and contaminated gallstones and artificial cholesterol pills were placed in each rat in different standard regions in the abdominal cavity. In one group antibiotic lavage was applied. On the 42th postoperative day, specimens were taken from the surrounding tissues of each gallstone for histology followed by extermination of the animals. The inflammations in the samples were classified into three groups by the help of inflammatory cells and reactions occurring in the tissue sections: gentle, moderate and serious.

Results: To compare the experimental groups the inflammation reaction depended on the type of the gallstones (p=0,0166). Sterile, artificial cholesterol pills did not cause any complications. Human gallstones caused serious inflammation and abscess formation independently of their contamination (p=0,3167). Contaminated gallstones with antibiotic lavage decreased the inflammation reaction in the surrounding tissues. In the sterile cholesterol inserted group (group 2) and in the antibiotic lavage applied group (group 5) only gentle and moderate inflammation could be observed (group 2 : p= 1:3 and group 5 : p= 9:4).

Conclusion: Human gallstones proved to have the effect of massive inflammation and abscess-formation. This effect significantly decreased with the use of antibiotic lavage. The best solution is to remove all of the lost gallstones from the abdominal cavity because their consequence can be a serious inflammation process.

Key-words: cholecystectomy, lost gallstones, cholesterol pills, inflammation, antibiotic lavage
SURGICAL ANATOMY OF THE HUMAN LIVER: LIVER SURGERY AND PARTIAL LIVER TRANSPLANTATION

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Introduction: In the last decade the number of living donor related liver transplantations and partial liver transplantations has greatly increased. The precise knowledge of hilar and intrahepatic biliary and vascular variations is essential to further reduce the incidence of intra- and postoperative complications of partial liver transplantation and liver resections.

Aim: For this reason the aim was to investigate the frequency and surgical relevance of these anatomical variations.

Materials and methods: A new synthetic resin corrosion cast method was worked out and more than 400 human liver casts were made. Furthermore, for post mortem simulation of liver splitting, organs were injected with special resin mixture (color coded and defined CT density) and fixed with Thiel-fixative. CT scans were taken on the casts and on the fixed preparations.

Results:
1. Biliary system: The statistical analysis of 140 biliary duct preparations revealed new variations and subvariations and differences in frequencies of certain biliary duct variations, compared to data available in the international literature.
2. Hepatic veins: The branching patterns and anastomoses of great surgical importance between the right and middle hepatic veins were observed and analyzed on 55 casts.
3. Hepatic artery: Patterns of intrahepatic branching (65 casts) and extrahepatic arterial blood supply (50 abdominal organ complex casts) showed slight differences in comparison to data published by others.
4. Portal vein: The hilar branching displayed normal anatomy in 60% of preparations (70 casts).
5. Using the resin filled and Thiel-fixed liver preparations the different types of liver splits could be planned and easily performed (3D CT reconstruction). The correctness of the plane of applied cut could be immediately checked due to color coded resin filling.

Conclusion: We provide the first complex detailed data on the incidence of hepatic vascular and biliary variations in the Hungarian population. Differences among the available statistics may derive from genetic differences among populations. Our model of liver split simulation may take part in the international surgical training hands-on courses.
FETUIN-A SERUM LEVELS IN AORTIC ANEURYSMS OF DIFFERENT ETIOLOGIES

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Introduction: Fetuin-A is a glycoprotein that inhibits extraosseous and vascular calcification. Its serum level is lower in atherosclerotic patients compared with healthy controls, but its role is unknown in aneurysmal diseases. The aim of our study was investigate the association of serum fetuin-A levels with aortic aneurysms of different etiology: Marfan syndrome and atherosclerosis.

Methods: In a single centre cross-sectional observational study 45 patients (30 with atherosclerosis and 15 with Marfan syndrome) were examined, sera were analyzed for fetuin-A, standard markers of possible inflammation, lipid profile, kidney and hepatic disease and diabetes. Systemic atherosclerosis was assessed by carotid intima-media thickness (IMT) measurement and arterial calcification score (ACS) of cardiac valves, carotids, aorta and femoral arteries determined by ultrasound. We used Mann-Whitney’s U test to compare the two independent groups.

Results: Serum fetuin-A levels (median and IQR) were significantly lower in the atherosclerotic cohort than in patients with Marfan syndrome: 708 μg/ml (612-780) and 756 μg/ml (708-816), respectively (p =0.0428). Mean and maximum IMT, ACS values and homocysteine levels were significantly higher in patients with atherosclerosis: p <0.0001, p <0.0001, p <0.0001 and p =0.0034, respectively. There was no significant difference among the groups analyzing the results of lipid profile and acute phase markers.

Conclusion: The significantly lower serum level of fetuin-A in the atherosclerotic aneurysm group supports the protective role of fetuin-A in the evolution of arterial calcification.
ADHESION FORMATION IN THE ABDOMINAL CAVITY IN A RAT MODEL – MACROSCOPIC RESULTS

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Introduction: Adhesion formation is an important problem following most of the abdominal surgical procedures. It can cause bowel obstruction, infertility, and can prohibit the normal motility of the abdominal organs. Adhesions can cause pain and constitute a difficulty when later surgical procedures are needed.

Aim: Our aim was to work out a proper animal model for adhesion formation and to follow up the intraabdominal events that took place in the early postoperative period.

Material and methods: Male Wistar rats were used in this experiment. 32 animals were operated for inducing adhesion formation in the abdominal cavity. Following median laparotomy the peritoneum was removed in a 2x1 cm area and the coecum was injured with 4 times 2 cm long incisions. These two surfaces were strictly laid together and the abdominal cavity was closed. The rats were re-operated in different time in the early postoperative (po) period. The presence, the location, the extension and the stability of adhesion formation was determined.

Results: There was not any adhesion formation in 4 animals. The adhesion in most of the animals was between the two injured surfaces during the early period. The involvement of the incision area in adhesion was higher in the early period. In many cases the liver and the omentum took part in the process of adhesion formation. At least one of the injured surfaces was involved in the most extended adhesions. We could not observe any distant adhesions. In the first 3 days the adhesion was not stabilized, the surfaces could be easily separated from each other. The strong stabilization process started on the 3rd po. day and all of the adhesions were stabilized by the 4th po. day. From that time the adhesion was stronger and their dissection could cause enormous damages in the tissues.

Conclusion: In this procedure we found a good method for modelling adhesion formation. We could follow up the stabilization procedure and all of the macroscopic changes after the operation.
ADHESION RELATED CELLULAR EVENTS FOLLOWING EXPERIMENTAL SURGICAL PROCEDURE IN THE ABDOMINAL CAVITY

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Introduction: Adhesion formation is one of the most occurring consequences of a surgical procedure which has effect on the patient’s late life quality. During the intraabdominal wound healing the fibrinolysis process could change. The balance between the fibrin degradation and fibrosis leads to adhesion formation with increasing tenancy.

Aim: The aim of our study was to work out a reliable experimental model of the adhesion formation where all of the cellular and molecular events can be followed.

Material and methods: Male Wistar rats were used in experiment. 32 animals were operated for inducing adhesion formation in the abdominal cavity. Following median laparotomy the peritoneum was removed in a 2x1 cm area and the coecum was injured with 4 times 2 cm long incisions. These two surfaces were strictly laid together and the abdominal cavity was closed. Tissue samples were taken in different times of the first postoperative (po.) week. The samples were taken from all the places where adhesion formation was present. The samples were stained with Hematoxylin-Eosine and cellular events were followed up.

Results: In 90% of the operated animals adhesion formation was detected in the abdominal cavity. In the histological examination the steps of the wound healing could be followed. In the early period heavy inflammation was seen with a lot of granulocytes. Stronger inflamed area was found between the muscle fibres of the peritoneum. This process slowly disappeared by the 2-3rd po. day. From the 2nd day angiogenesis, activated fibroblasts could be seen and from the 4th day connective tissue was dominant in the samples. The number of the cells reduced and the amount of extracellular matrix increased. From the 3rd day the stabilization of the adhesion started and this could be seen in the tissue samples too. From the 4-5th po. day strongly connected adhesion surfaces could be seen in the histological examination.

Discussion: We have found a reliable model for examining adhesion formation. The cellular and extracellular procedures can be well followed step by step by histological examination. This model can be used for our further examination of adhesion formation where the aim is to find the key cellular and molecular point of this process.
P5-7

CHANGES OF HEMORHEOLOGICAL LABORATORY PARAMETERS AND COURSE OF MEDICATION DURING EXPERIMENTAL ACUTE PANCREATITIS IN RATS

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Introduction: The role of microcirculatory disturbance in severe acute pancreatitis is generally accepted.

Objectives: Effectiveness of Pentoxiphyllin, Enoxaparine and Flunixin was analysed in experimental cerulein pancreatitis.

Methods: Fifty female Sprague-Dawley rats divided into 5 groups (n=10). In general anaesthesia 2 hours after acute pancreatitis was induced tissue microcirculation was examined, cupping, was performed in all group. Control group (C): no pancreatitis. Acute pancreatitis group (AP): 10 μg/kg cerulein was injected s.c. AP+Flunixin group (AP+Fl): 2,5 mg/kg Flunixin was also administered. AP+Pentoxifyllin group (AP+Pe): 50 mg/kg Pentoxifyllin i.p. was also administered. AP+Clexan group (AP+E): 2 mg/kg Enoxaparine s.c. was also administered. Tissue blood flow unit (BFU), rectal temperature, blood acidity and hemorheological parameters were measured.

Results: The rectal temperature was significantly elevated in AP, it was moderate in AP+Fl and AP+E and high in AP+Pe. The decrease of BFU was lower in AP+Pe and AP+Fl. The blood pH level decrease was moderate in all treated groups. The elevation of hematocrit level was was moderate in AP+Fl. The maximal elongation index values decrease in AP+Fl was not noticed. The osmoscan confirmed the best result also in AP+Fl. The M and M1 indices were elevated in all AP, it was moderate in AP+Fl and significant in AP+Pe. The changes of the RBC aggregation parameters were resemble.

Conclusion: The measured drugs had good effects on microcirculation, pH levels and micro-rheologic parameters in cerulein induced acute pancreatitis in rats.
INTESTINAL COLD STORAGE IN PACAP-38 CONTAINING PRESERVATION SOLUTION

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Small-bowel is one of the most sensitive organ to ischemia-reperfusion injury, which is a significant problem during transplantation. Pituitary adenylate cyclase-activating polypeptide (PACAP) has cytoprotective effect in ischemic injuries of various tissues. The aim of our study was to measure oxidative stress markers, histological damages and changes of PACAP-38 immunoreactivities and cytokine levels in intestinal grafts stored PACAP-38 containing preservation solution.

Small-bowel autotransplantation was performed on male Wistar rats (n=35). Grafts were stored in University of Wisconsin (UW) solution at 4°C for 1 hour (GI), for 3 hours (GII), and for 6 hours (GIII); and in PACAP-38 containing UW solution for 1 hour (GIV), for 3 hours (GVI), and for 6 hours (GVIII). After preservation, performing vessel anastomosis reperfusion began, which lasted 3 hours in each group. Tissue biopsies were collected after laparotomy (control) and at the end of the reperfusion periods. Tissue oxidative stress parameters (malondialdehide, reduced glutatione, superoxide dismutase) were measured from homogenates. Intestinal PACAP-38 immunoreactivities were measured by radioimmunoassay. To measure cytokine array from tissue homogenates we used rat cytokine array.

Tissue lipid peroxidation was elevated in a time-dependent manner in GI-GIII. These changes were significant after 6 h (153.04±7.2) compared to sham operated (110.44±5.5) and compared to control results (120.0±1.1 μmol/g, p<0.05). Meanwhile, the capacity and activity of the endogenous antioxidant system decreased significantly after 3 and 6 h preservation (GSH: 808.7±5.2; 720.4±8.7 vs. 910.4±μmol/g; SOD: 125.1±1.4; 103.3±1.9 vs. 212.1±5.8 IU/g). Qualitative and quantitative histological results showed destruction of the mucous, submucous layers, and crypts in GI-GIII compared to GIV-GVIII tissues. Levels of PACAP-38 immunoreactivity decreased after 1 hour and 3 hours preservation compared to control levels. This decrease was significant following 6 hours cold storage (p<0.05). Values remained significantly higher in grafts stored in PACAP-38 containing UW. Cytokine array revealed that expression of the soluble intercellular adhesion molecule-1 (sICAM-1, CD54), L-selectin (CD62L/LECAM-1) and the tissue inhibitor of metalloproteinase-1 were increased in GIII. Both 6 hours cold storage in PACAP-38 containing UW solution and 3 hours reperfusion caused strong reduction in these cytokines activation in GIV. RANTES (CCLS) levels were increased in all groups.

Our present study showed that PACAP-38 adding to the conventional UW preservation solution decreased tissue oxidative injury and structural damages. PACAP-38 immunoreactivities decreased in a time dependent manner during intestinal cold preservation, which could be ameliorated by administration of exogenous PACAP-38 to the preservation solution. Moreover, PACAP-38 could mitigate tissue cold ischemic injury-induced changes in cytokine expression. (Supported: OTKA PD77474, K72592, MTA Bolyai Scholarship)
THE ARTERIAL BLOOD SUPPLY OF THE PANCREAS – A SURGICAL ANATOMICAL STUDY

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Introduction: In the last decades the incidence of pancreatic cancer is further increasing in the population. Along with the use of sophisticated and extended surgical interventions the detailed knowledge of the arterial variations in the upper abdominal region is acutely essential for the surgeon. Therefore we aimed to investigate and analyze the variations of arteries supplying the pancreas in the Hungarian population.

Materials and methods: We examined 36 corrosion casts of human abdominal organ complexes according to Dr. Kiss's corrosion technique. The resin was injected through the abdominal aorta and after its hardening the parenchyma was corroded. Thereafter, using the most widely accepted nomenclature we analyzed them macroscopically. Digital photographs and CT scans were taken on the casts and 3D reconstruction of the images were prepared. Data obtained were compared with those available in the international literature.

Results: In view of surgical management of the aggressive and less invasive resections, the blood supply of the pancreatico-duodenal complex by two main arterial branches and the peripancreatic arches are of high priority. The anterior superior pancreaticoduodenal artery (ASPDA) arose from the gastroduodenal artery (GDA) in 94 % (34 casts), in the remaining cases we found atypical origin, from the celiac trunk and the proper hepatic artery (HA) equally. The posterior superior pancreaticoduodenal artery (PSPDA) originated from the GDA in 92 % (33 casts) and some preparations showed atypical origin from the common hepatic artery (CHA) in 2 casts and from the HA in 1 cast. In one case the GDA stemmed from the splenic artery (SA). The inferior pancreaticoduodenal artery (IPDA) derived from the superior mesenteric artery (SMA) with a short common trunk in 11%. 21 casts (58 %) displayed the variation described in the literature as the dominant one in which both an upper jejunal artery and the SMA contribute to the formation of IPDA. The anterior and posterior inferior pancreaticoduodenal artery arose separately from the SMA in 31 % (11 casts). A missing dorsal pancreatic artery (DPA) was found in 8 casts (22%), this vessel branched off from the splenic artery (SA) in 53 % (19 casts), from the CHA in 14 % (5 casts), from the coeliac trunk in 8 % (3 casts) and from the left gastric artery in 1 cast. The body of the pancreas was supplied exclusively by the transverse pancreatic artery in 2 casts and this branch arose from the SMA or the GDA in 9 cases (25%).

Conclusions: A previously not described site of the origin of GDA from the SA was observed. Since in the post-pancreatoduodenectomy vascular complications this vessel is often involved, its variation is of clinical importance. Among the 36 casts we detected two variants of the PSPDA, which are considered in the literature to be extremely rare. Our results stress on the importance of the detailed preoperative radiological analysis of the upper abdominal vascular structures.
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