MEDICINE AS A LEARNED AND HUMANE PROFESSION

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What is medical profession?

- more than just a profession,
- a „call”
- live it or leave it…

Caravaggio: Call of St. Matthias. (San Luigi dei Francesi, Rome)

The physician has multipronged responsibility to

him/herself:

- gain professional knowledge ASAP

the health care system:

- as an expert who helps create standards, measures of outcome, clinical guidelines, and mechanisms to ensure high-quality, cost-effective care

the individual patients:

- who entrust their well-being to that physician to promote their best interests within the reasonable limits of the system

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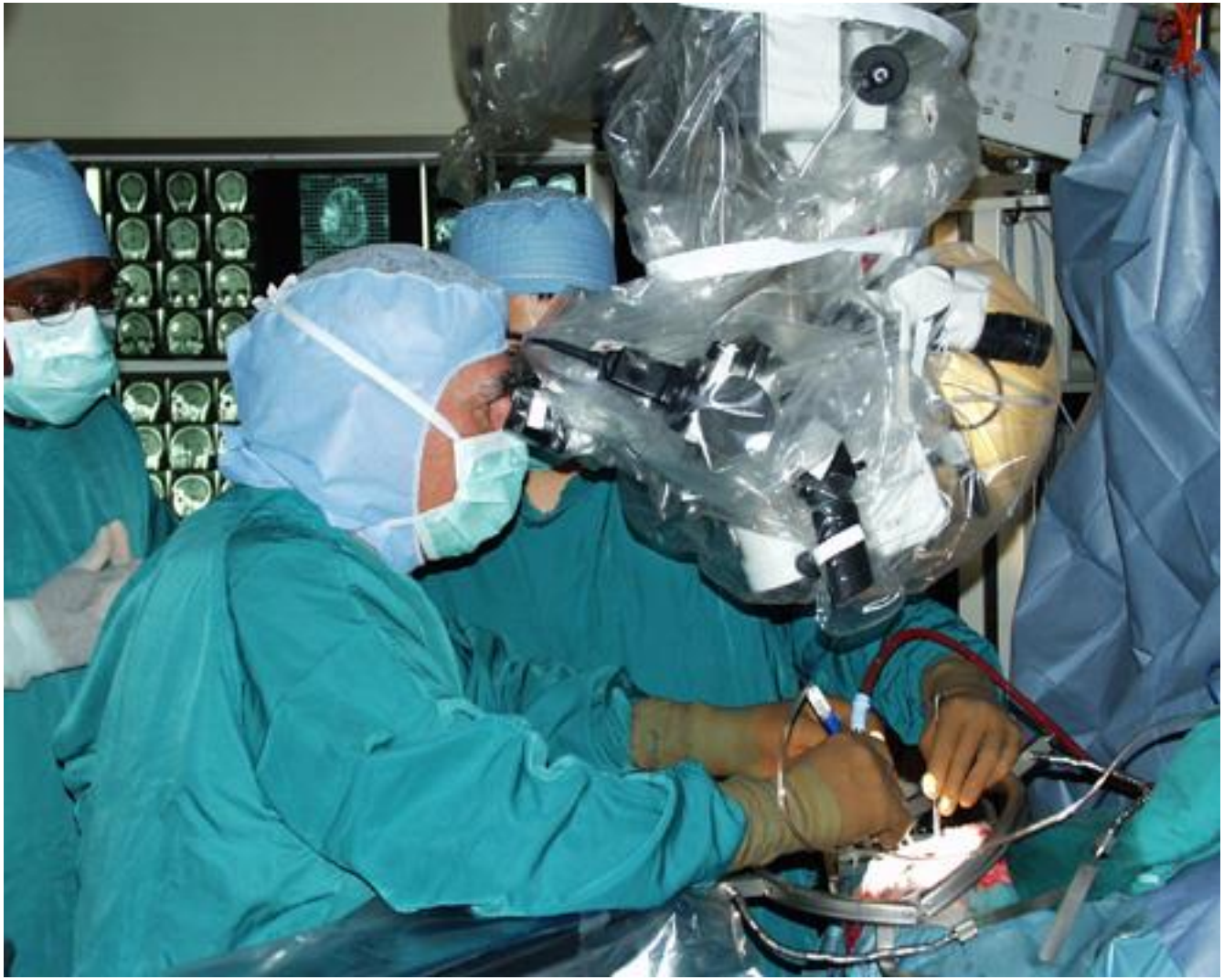

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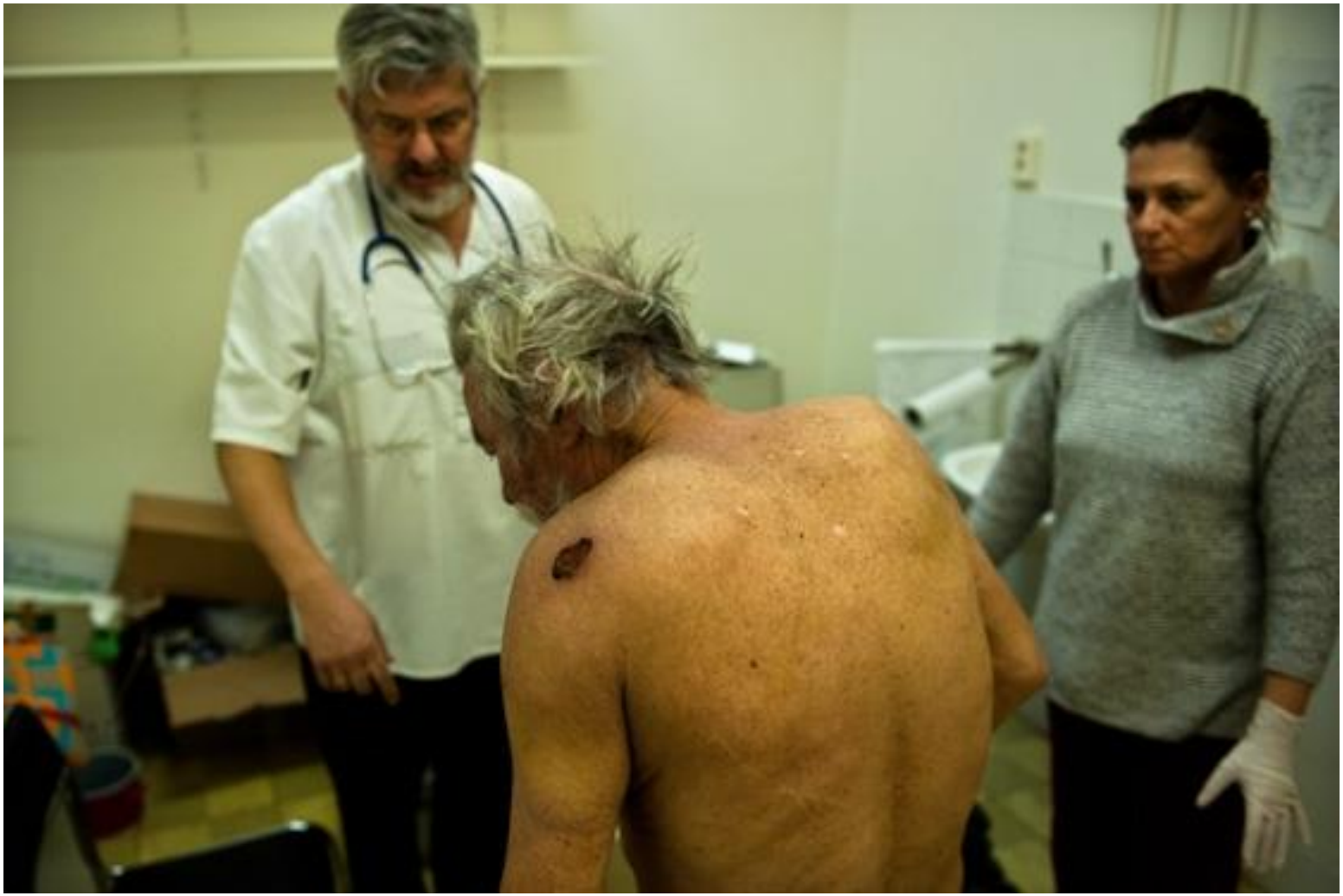

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www.thetimes.co.uk

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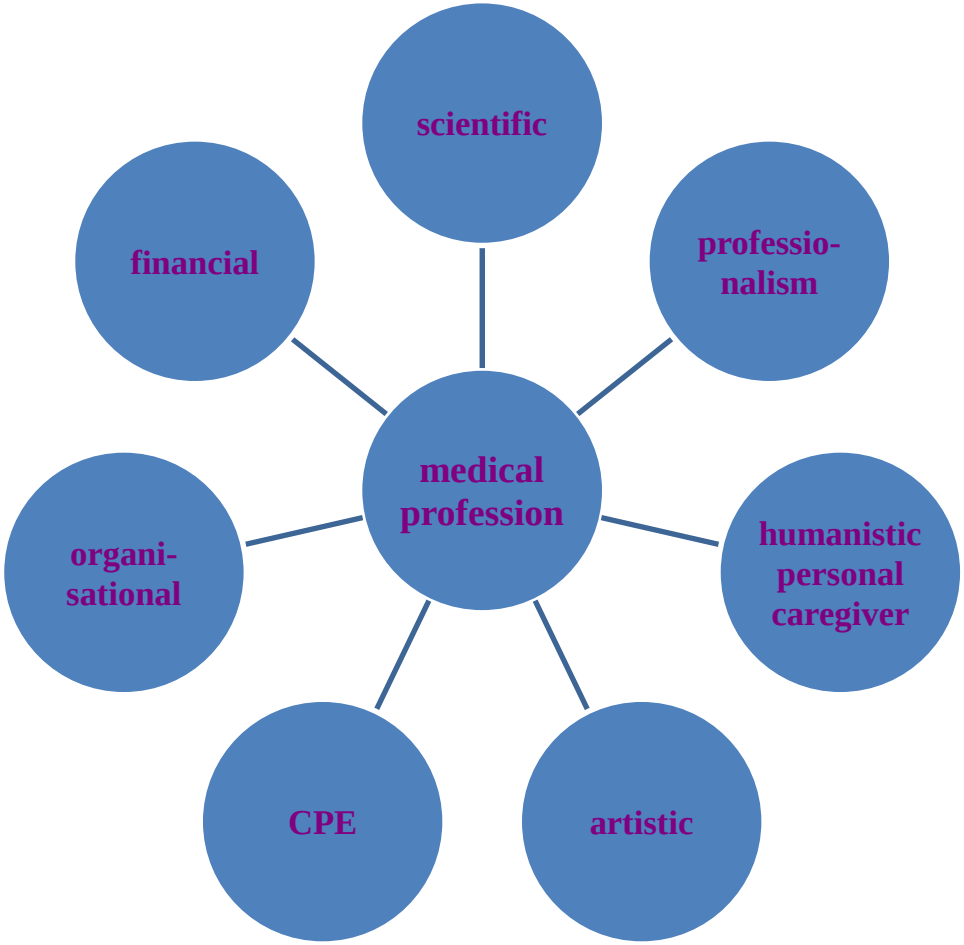
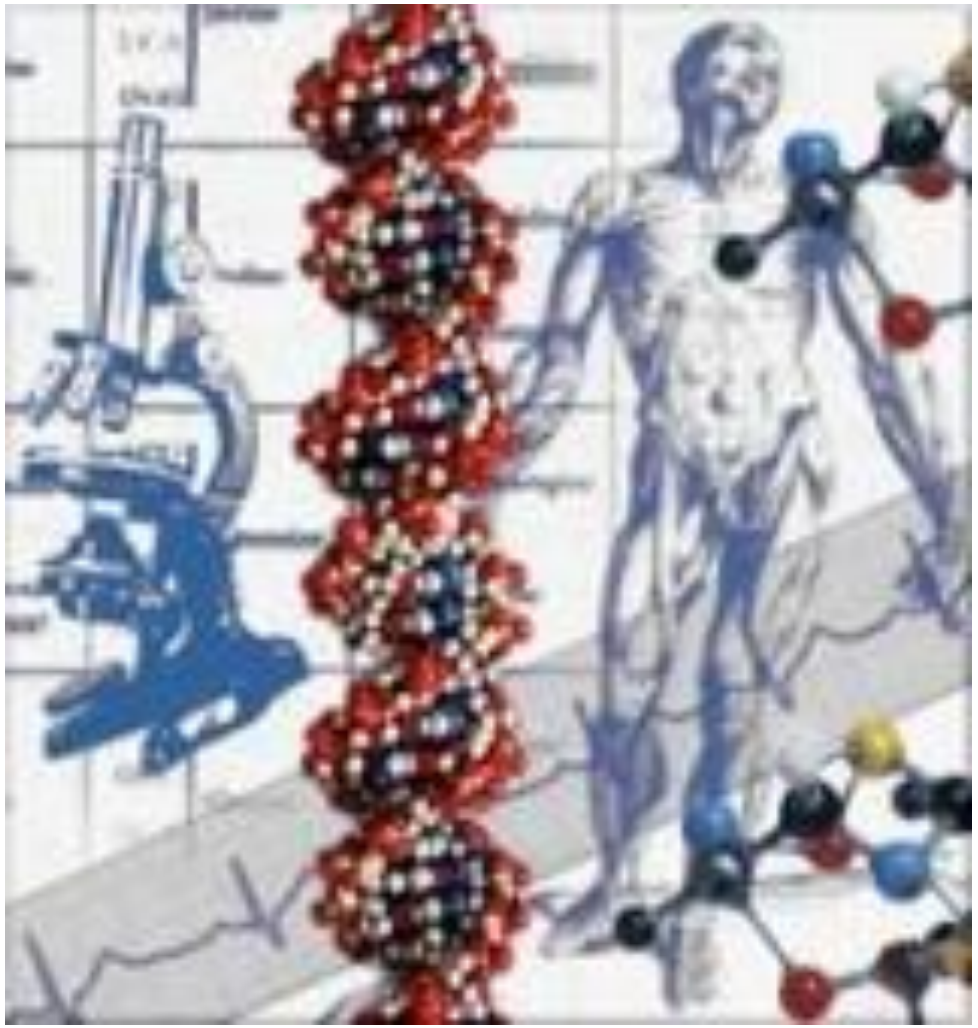
The attributes of medical profession



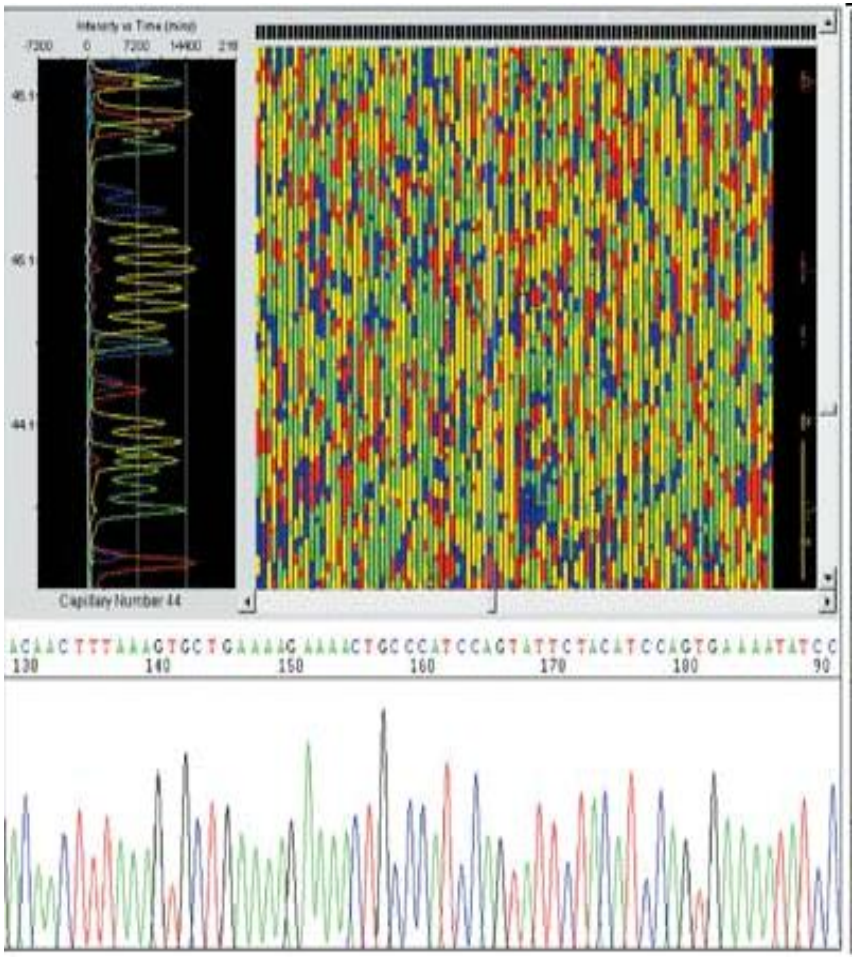
1. The physician as a scientist

- The solution of several clinical issues is based on scientific technology and deductive reasoning.



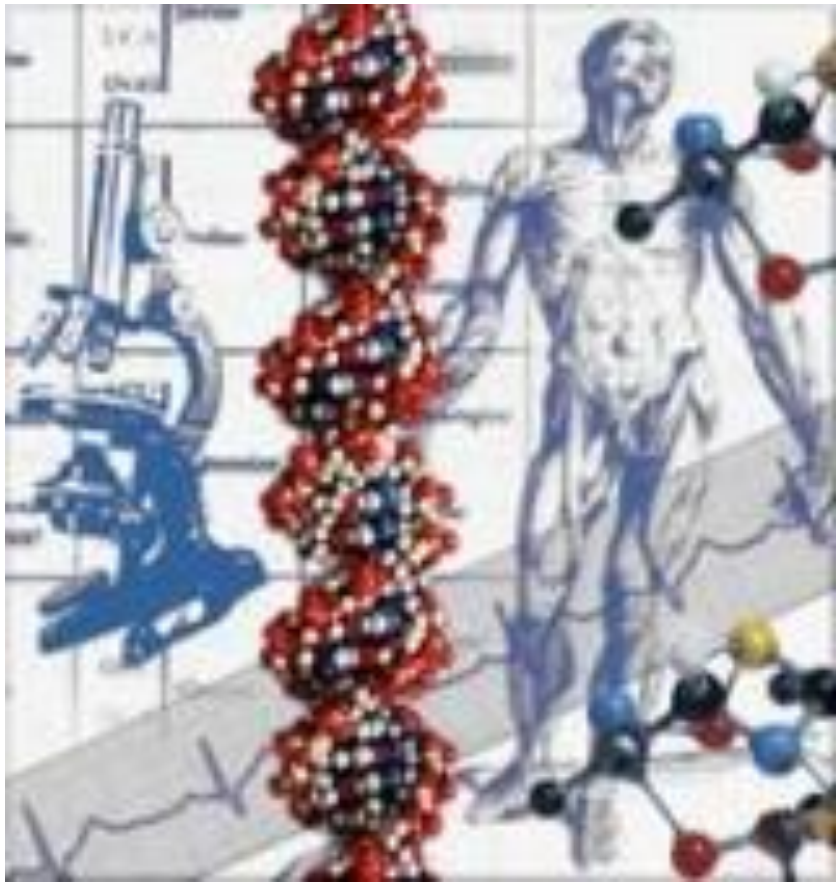
Physicians must be trained as scientists to:

- understand and apply the thinking patterns of the scientific method
- to develop an inquiring mind
- to know how to design experiments and obtain data
- how to analyze the validity and generalizability of those data
- to ask questions and provide truthful answers

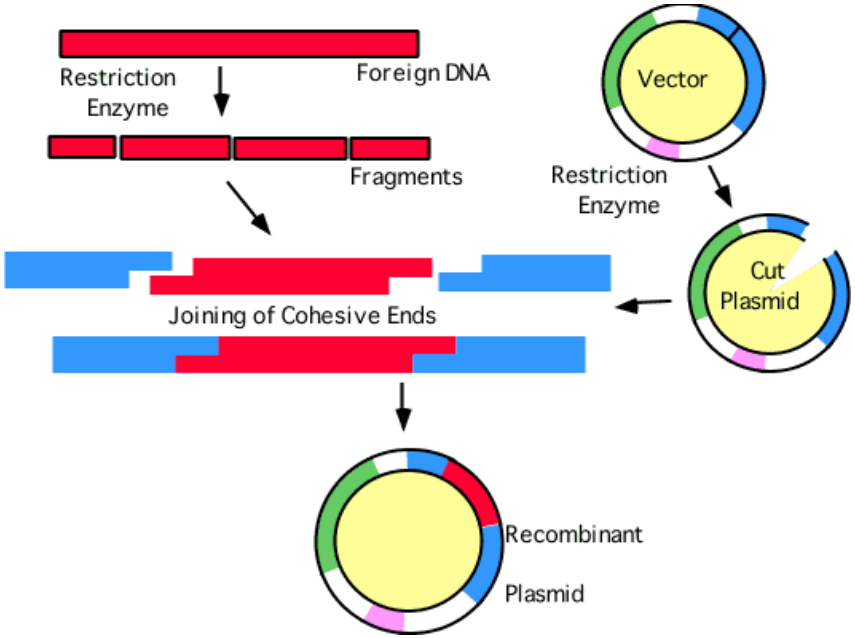


Most of these learned skills extend to the management of individual cases at the bedside, i.e.

- how to gather information
- how to synthesize it
- how to interpret it to make a full diagnostic story
- how to bring the collective wisdom together in the design and execution of appropriate therapy.

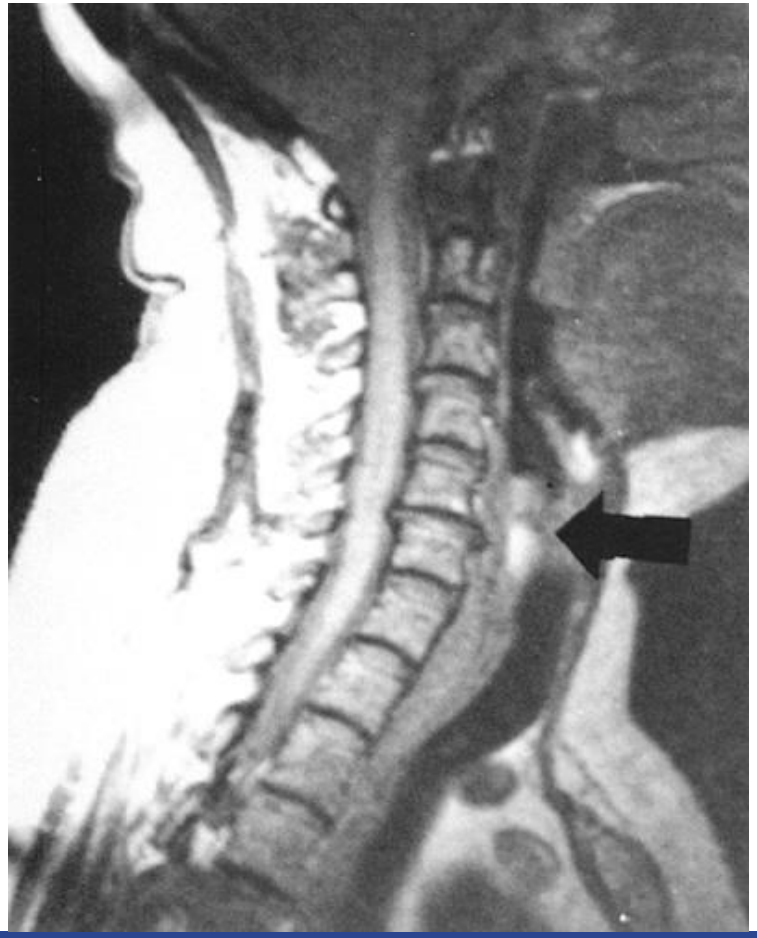


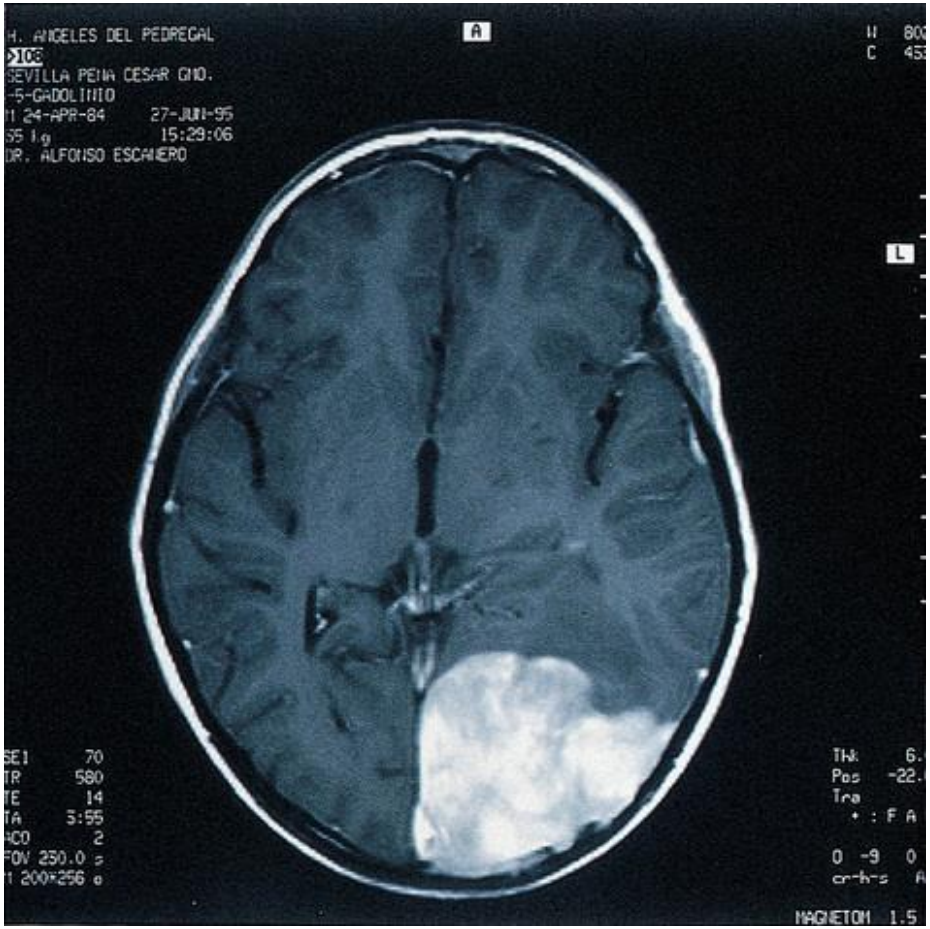
Biotechnology



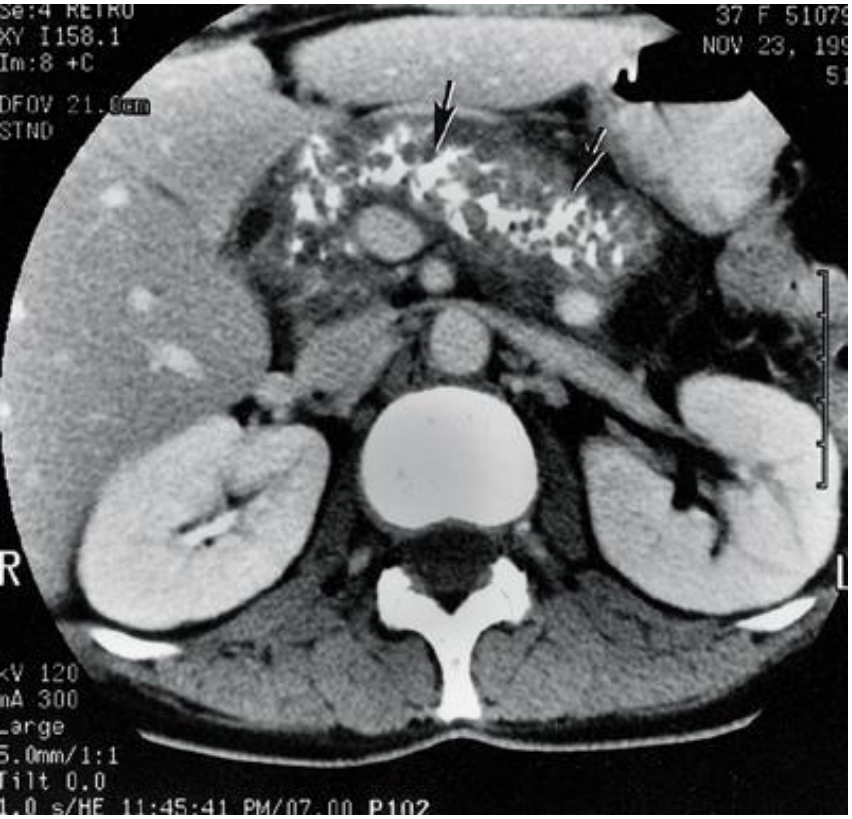
- Diagnostic tests
- Chimera antibodies in therapy
- Vaccines (HBV)

MRI: C5-6 herniation, parieto-occipital brain infiltration in ALL

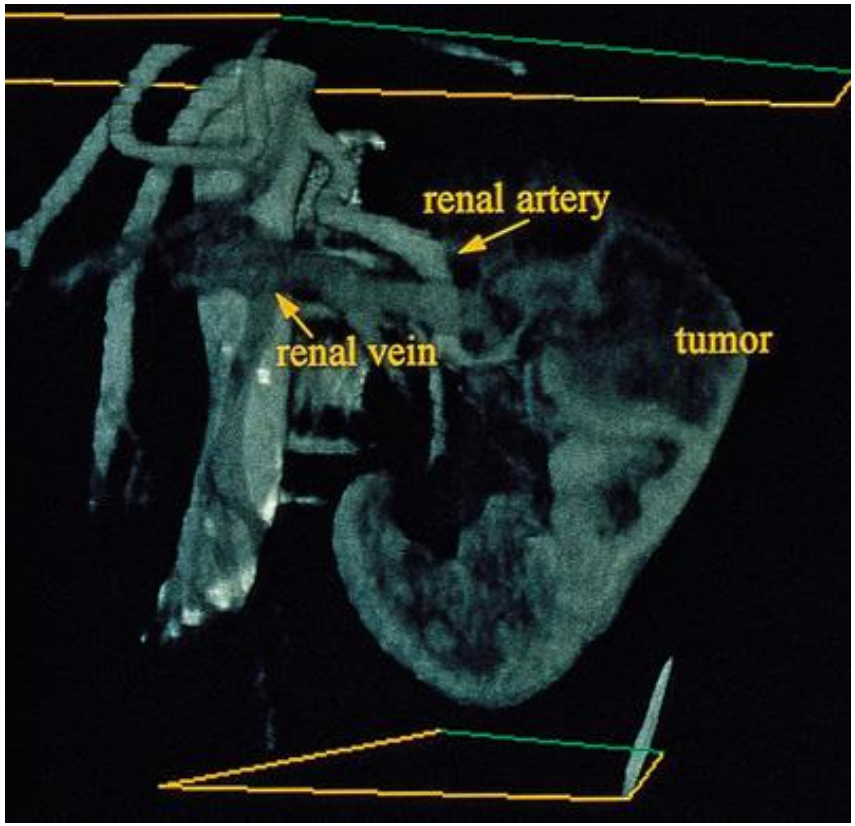




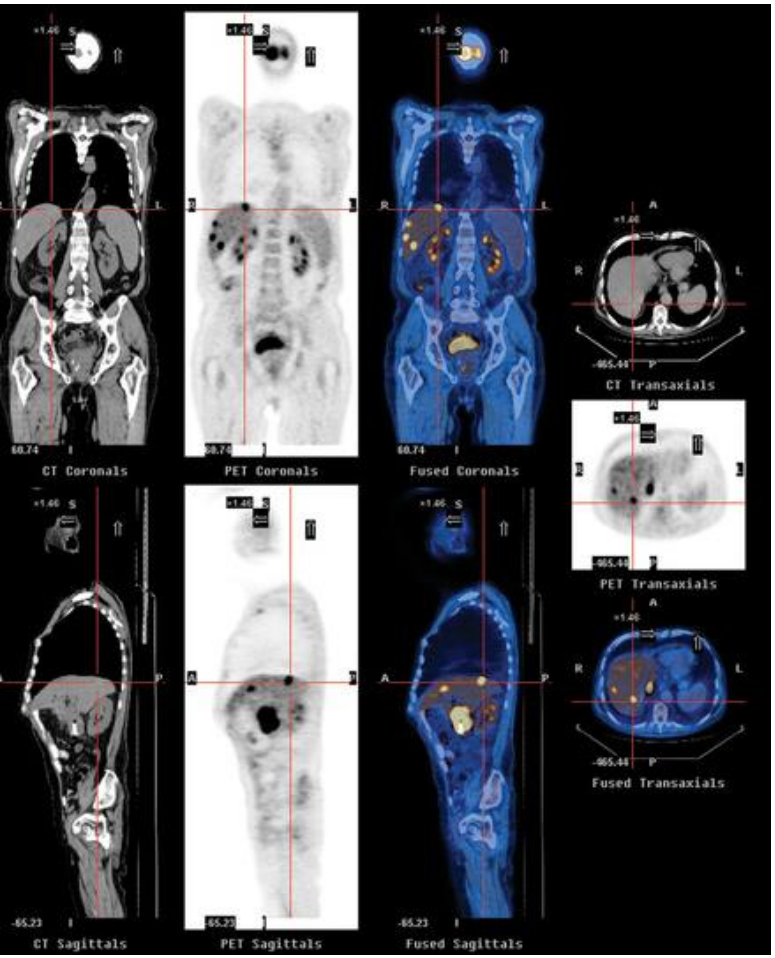
CT

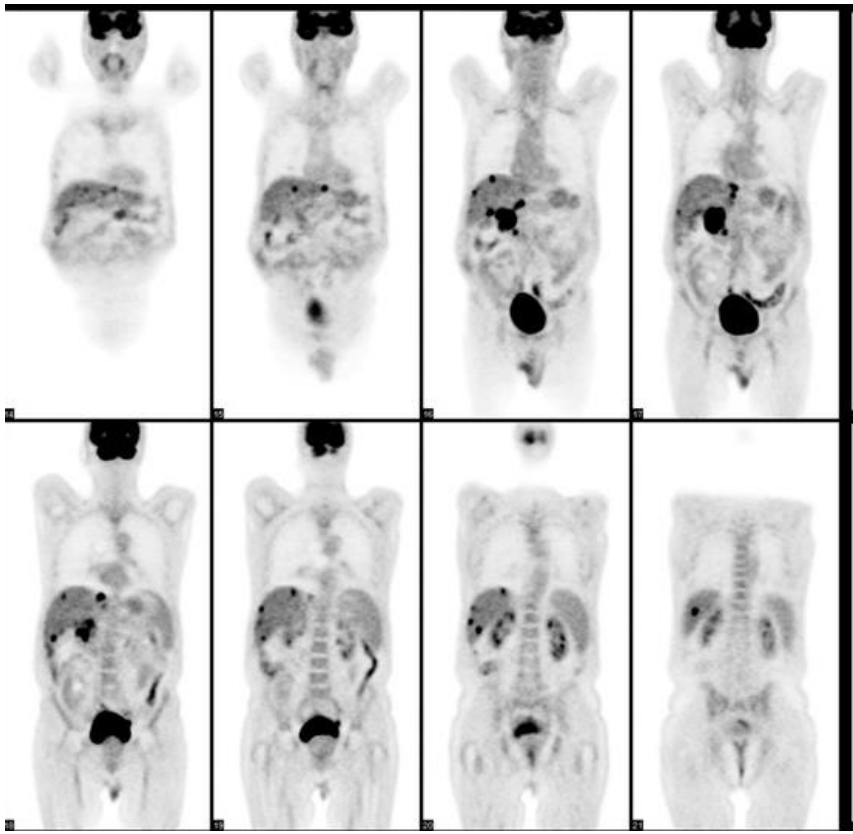


Spiral CT

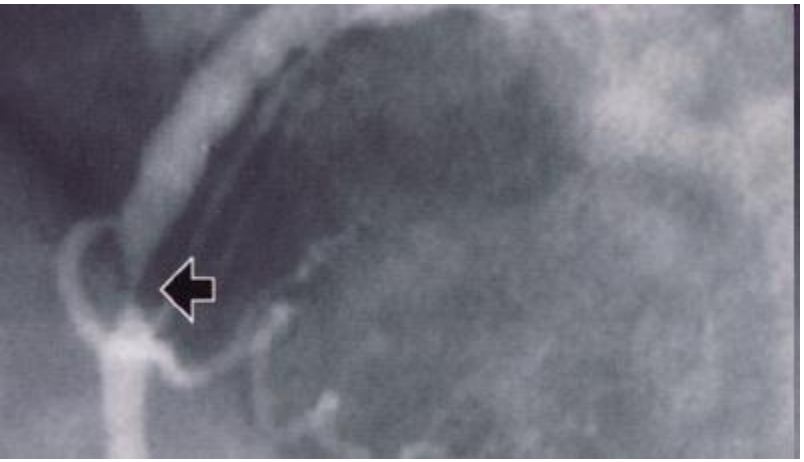


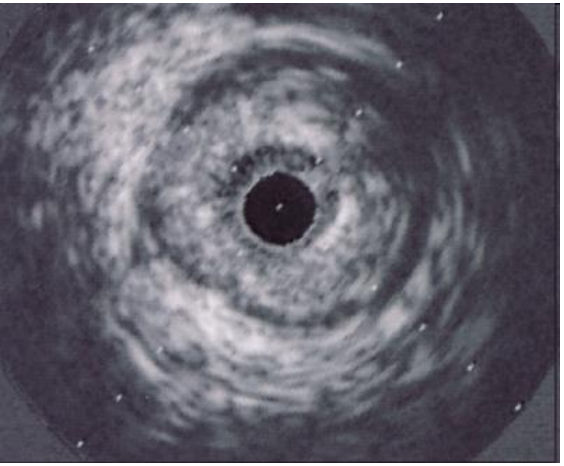
Pancreas adenocarcinoma: CT, PET, PET-CT (A) and PET (B)

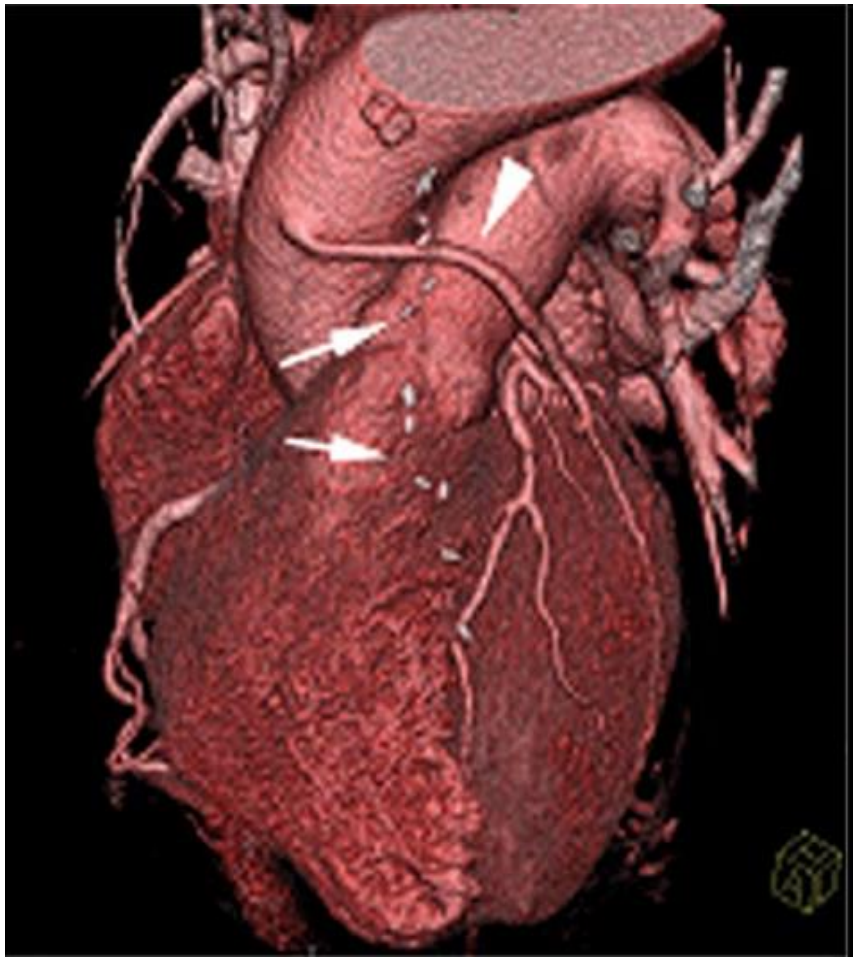


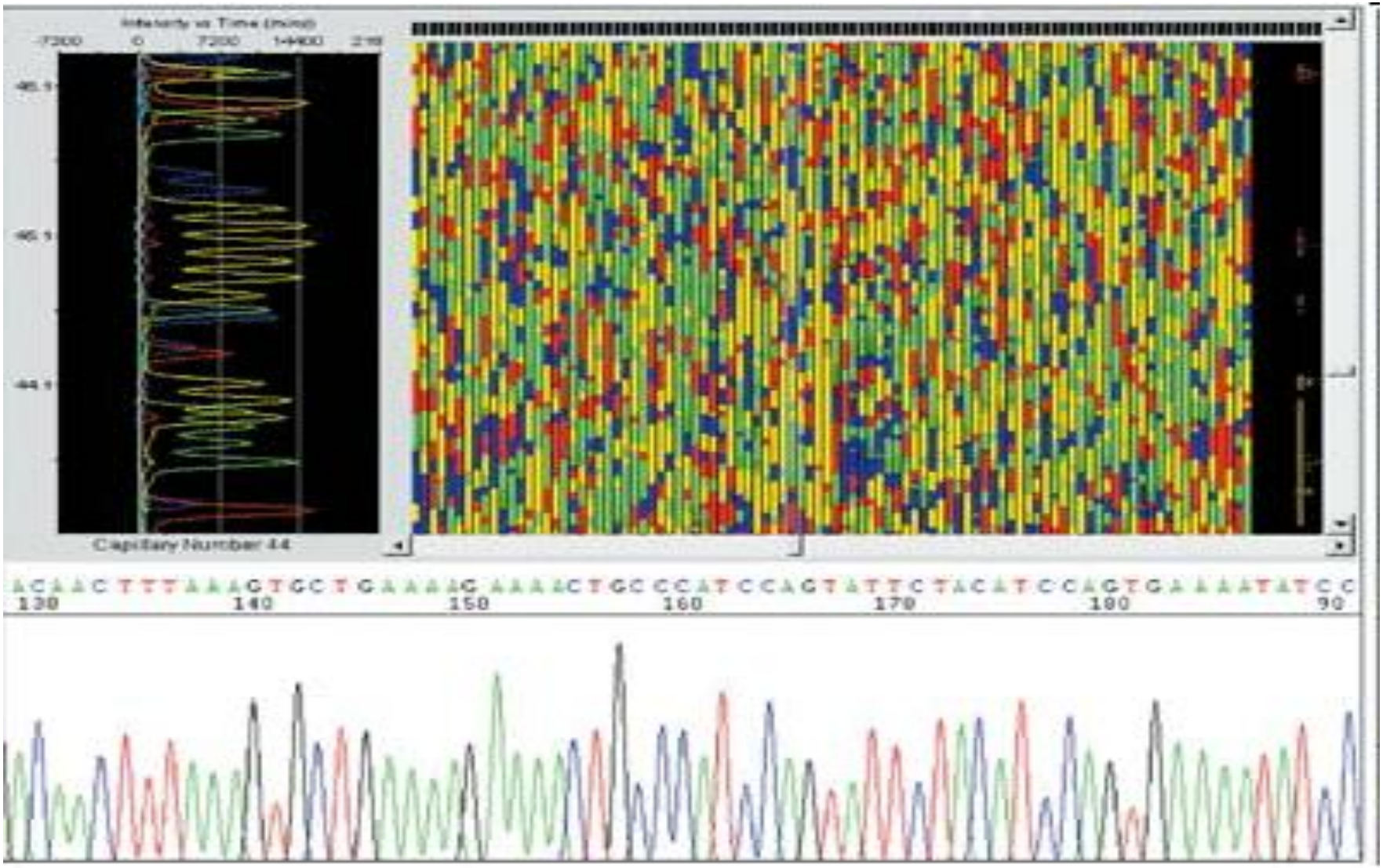


Invasive cardiology



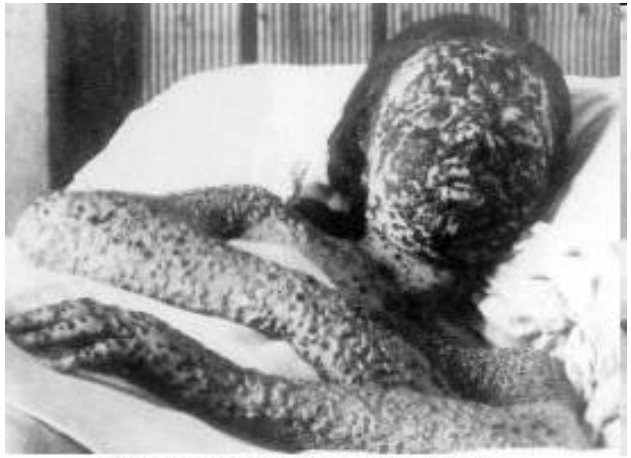




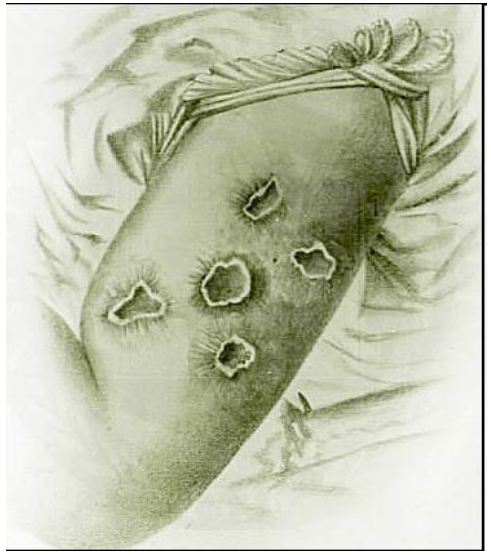

Capillary Number 44

- Medical science starts with the observation of the patient.
- Then it is diverted to individual molecules and basic biological processes (reduced).
- The scientifically justified diagnostic and therapeutic results will then get back to the sick individual.

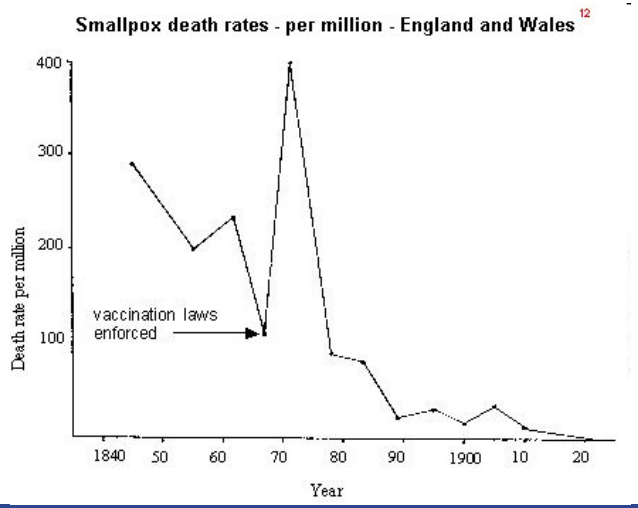
Vaccination against and eradication of smallpox

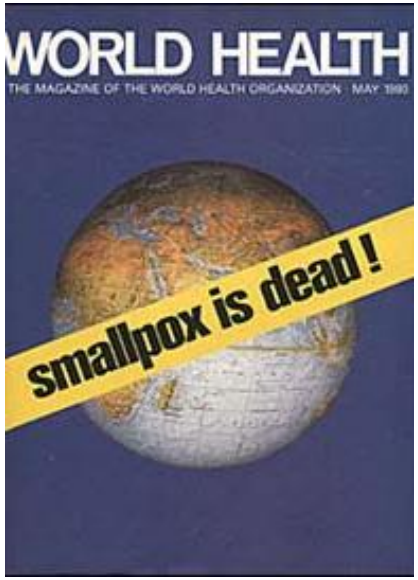


Smallpox Symptoms (Black-pox)



Edward Jenner (1749-1823)





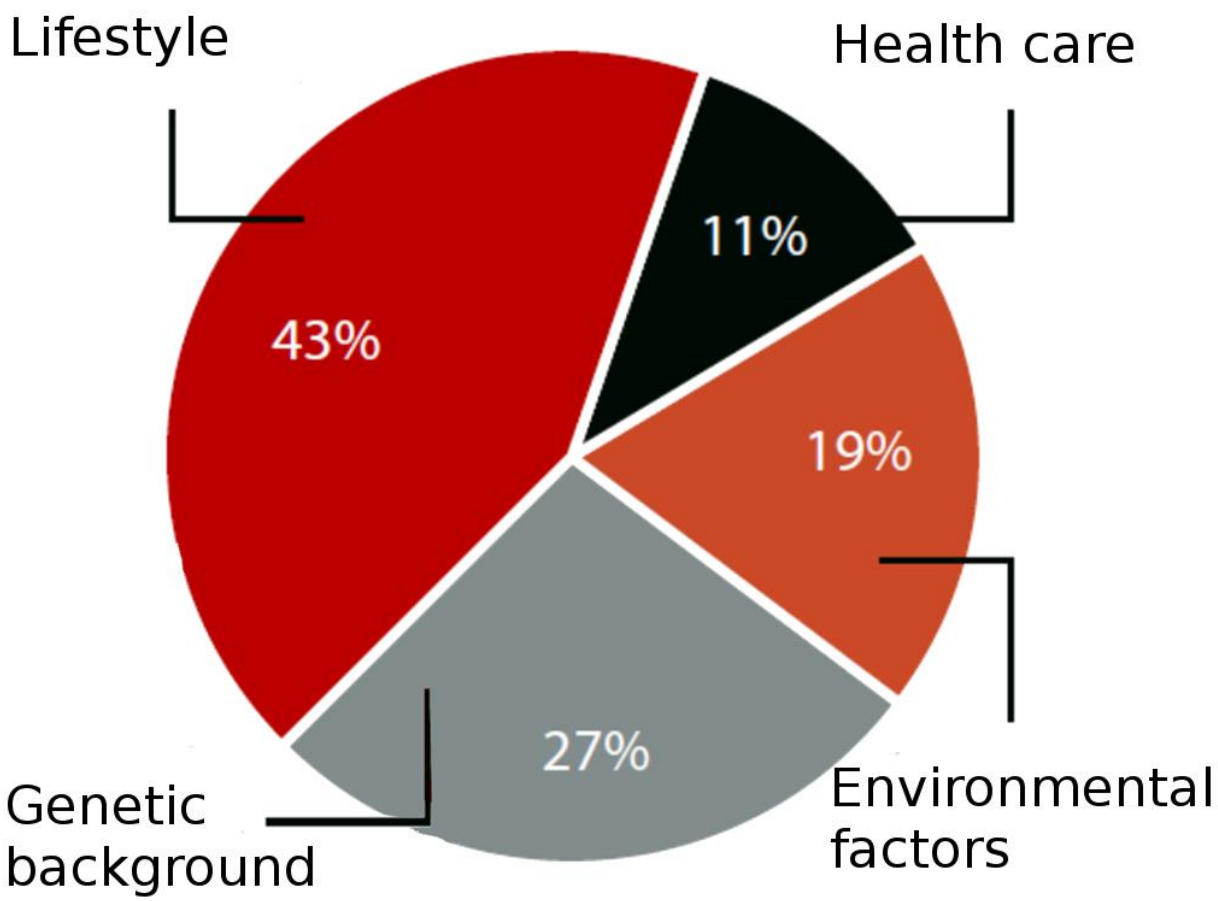
BUT: science is not everything

Forms of deleterious behavior:

- alcohol
- drug abuse
- suicide
- smoking
- aggression

cause more than the half of health expenditures

Determinants of health status of the population

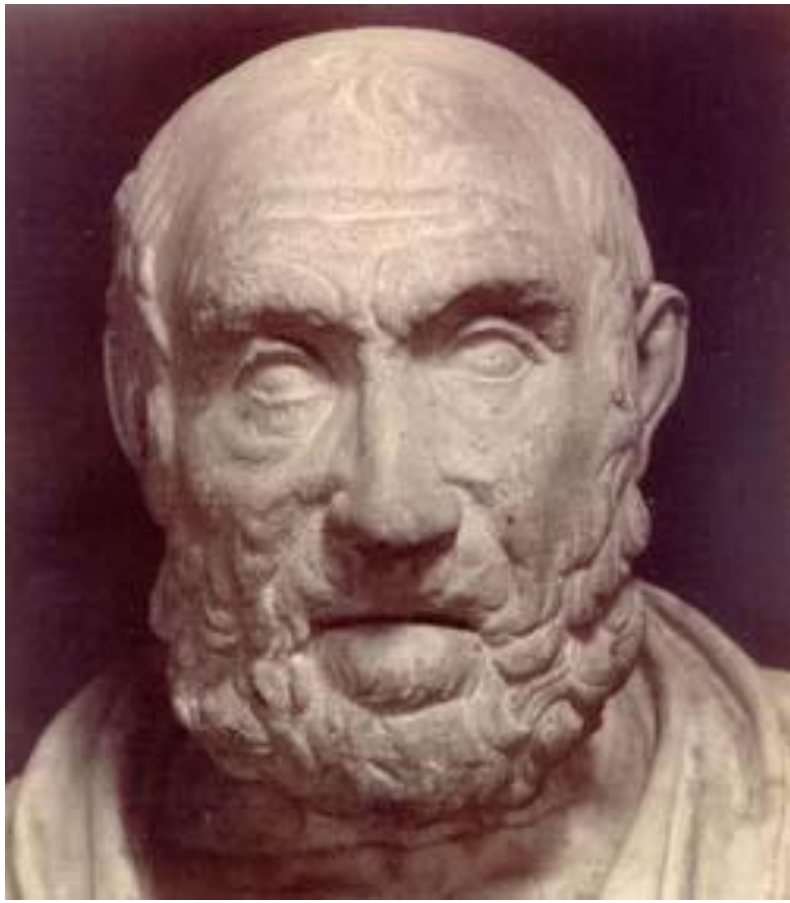


Source: Varga-Hatos K, Karner C. Eü. Gazd. Szemle 2008/6 25-33. (2008)

2. The physician as a professional 1

Definition: Attributes and behaviors that serve to maintain the interest of the patient above one's self-interest.

„Salus aegrotae suprema lex esto"



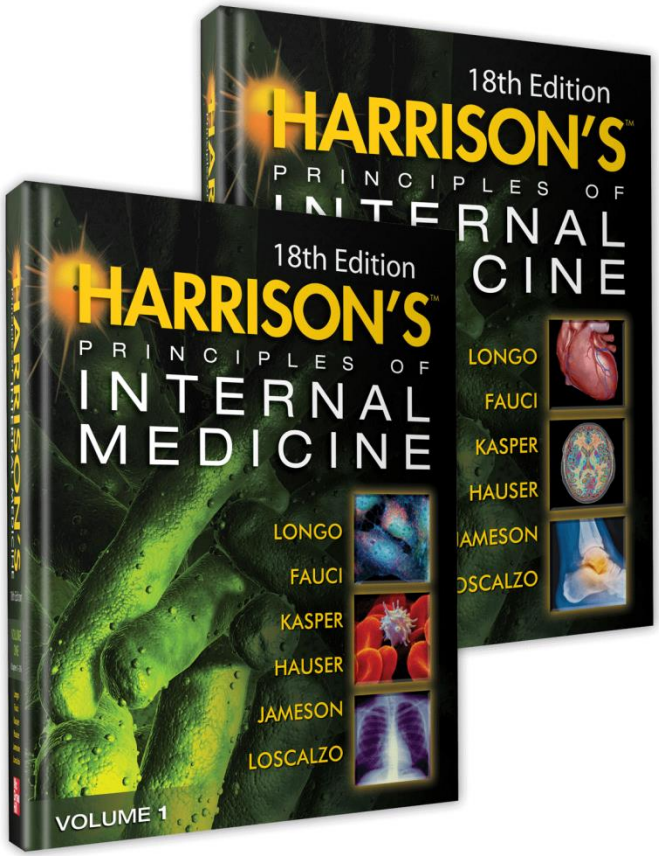
The physician as a professional 2

- Professionalism aspires to altruism, accountability, excellence, duty, service, honor, integrity, and respect of others.
- To remain professionals, dignity, and understanding must permeate all our interactions –all our thinking, teaching, learning, and listening

A commitment to:

- the highest standards of excellence in the practice of medicine and in the generation and dissemination of knowledge.
- the attitudes and behaviors that sustain the interest and welfare of patients.
- be responsive to the health needs of society.

Diagnostic reasoning is a reverse process



„Was mann weiß, sieht mann”
„Man sieht nur, was man weiß” (Goethe)

Causes of headache

Primary headache syndromes

- Migraine, cluster headache, tension headache, trigeminus neuralgia

Symptomatic headaches

Skull or neck injuries

- Commotion, epidural or acute subdural hemorrhage, chronic subdural hemorrhage, whiplash syndrome, posttraumatic headache

Vascular diseases

- Subarachnoideal hemorrhage, non-hemorrhagic malformations, giant cell arteritis, arterial dissection, sinus thrombosis, ischaemic stroke

Non-vascular intracranial diseases

- Disturbances of liquor circulation, space-occupying lesions (brain tumors)

Infections

- Meningitis, encephalitis, abscess

Systemic infections

- influenza

Chemical agents (drugs) and deprivation thereof

- Nitrites, phosphodiesterase inhibitors, CO, ethanol, Na-glutamate, cocaine, cannabis, histamine, drug abuse

Disturbances of the homeostasis

- Hypotension, hypertension, hypoxia, hypercapnia, dialysis

Ocular diseases

- Glaucoma attack, refraction defect, ocular inflammation

ORL diseases

- Otitis, sinusitis

Diseases of the teeth and the TMJ

- Tooth decay, TMJ wearing

Diseases of the cervical spine

- Spondylosis, occipital neuralgia

It is not easy to recognize a disease

- Which acute abdominal disease can be diagnosed the easiest?
- Which acute abdominal disease can be diagnosed the hardest?

Széll K: Orvoslásról. Magyar Bioetikai Szemle 2011/3-4:112-124.

„Among others, the difference between the good and the bad doctor is that the former considers more diagnoses than the latter.”

- *The central tenet is: „Could my conclusion be wrong?”*

Széll K: Orvoslásról. Magyar Bioetikai Szemle 2011/3-4:112-124.

The bulk of laboratory data does not substitute the careful and thorough observation and physical diagnosis

3. The physician as caregiver

When patients seek medical attention, they entrust their doctors with their very lives

- The physician must earn such a complete trust
- Technical abilities and skilled treatment of disease alone do not suffice

„You give but little when you give of your possessions – it is when you give of yourself that you truly give”

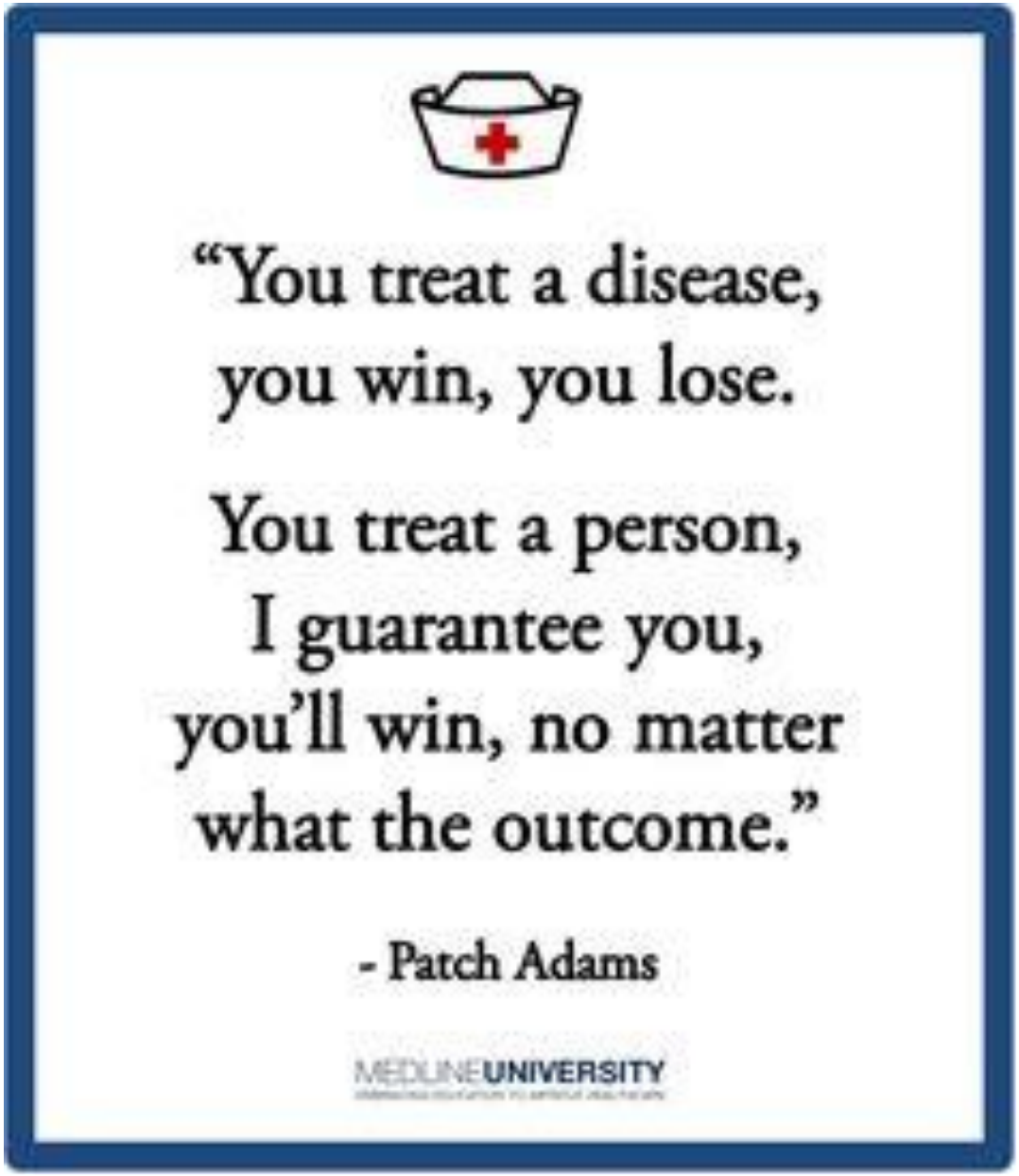
- (Khalil Gibran: The Prophet)

The physician as caregiver 2

Being sensitive or insensitive to patients

- *„Does my physician really care?”*
- *„Does what happens to me matter to the physician?”*
- *„Does my doctor show sensitivity and compassion beyond mere technical ability?”*

Being both professional and caring is an acquired skill


"You treat a disease,
you win, you lose.
You treat a person,
I guarantee you,
you'll win, no matter
what the outcome."
- Patch Adams
MEDUNEUNIVERSITY

The physician must be willing to

- answer the patient’s needs
- undertake a long-term commitment to the patient’s care

The patient still needs care

- when data come back from the clinical laboratory, the radiology department, the cardiac catheterization laboratory, or the surgical pathology laboratory.
- to understand their disease
- dealing with family interactions,
- to find a caring ear when they suffer most
- assistance in obtaining necessary additional medical help from specialists or consultants
- in processes involving personal situations (esp. when becoming old, frail, dependent, crippled, cognitively impaired)

The call is not permanent thus it requires continuous maintanance.

- Elements:
- good conscience
- loving-kindness
- ethics

- Enemies:
- financial profit
- cinism
- burnout
- unconcern

Széll K: Orvoslásról. Magyar Bioetikai Szemle 2011/3-4:112-124.

It is especially hard to deal with those who are:

- old
- demented
- fragile, dependent on others
- disabled,
- have with sensory organ defects

Patient approach without predication

- gender
- age
- religion
- certain diseases (STD-s and other infectious diseases, HIV, tbc)
- sexual orientation (homosexuality)
- financial status (homeless)

The familial, social cultural background must also be considered

Patients can elicit strong negative or positive feelings

The solution:

- stringent self-control!
- Reasoning and action should be taken according to the best interests of the patient

It is important

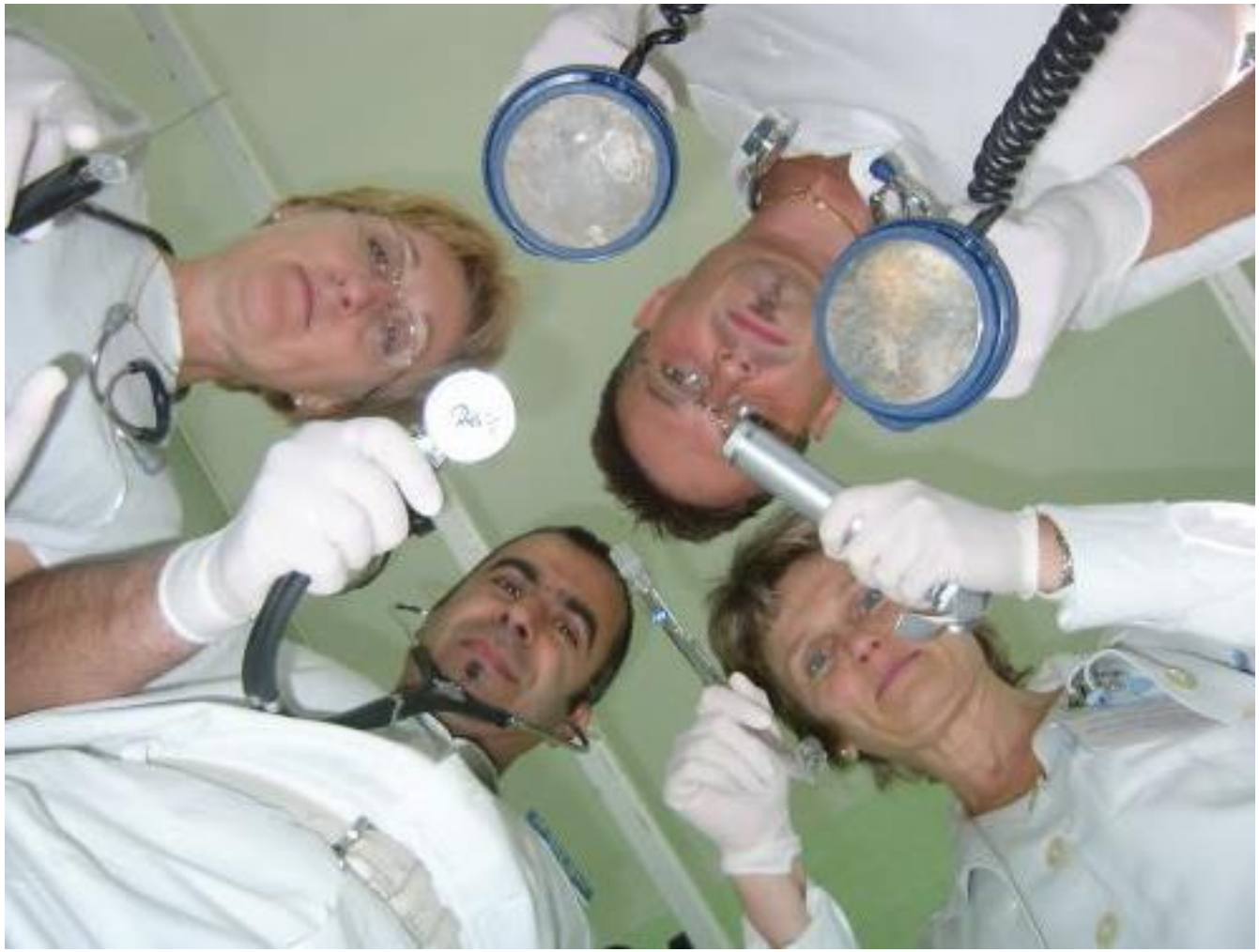
- The direct and detailed knowing the patient
- The knowledge of free agreement without rush with frequently repeated discussions
- The aim is to learn the primary standpoint of the patients from his/her point of view

Hospitals and outpatient offices can generate fear

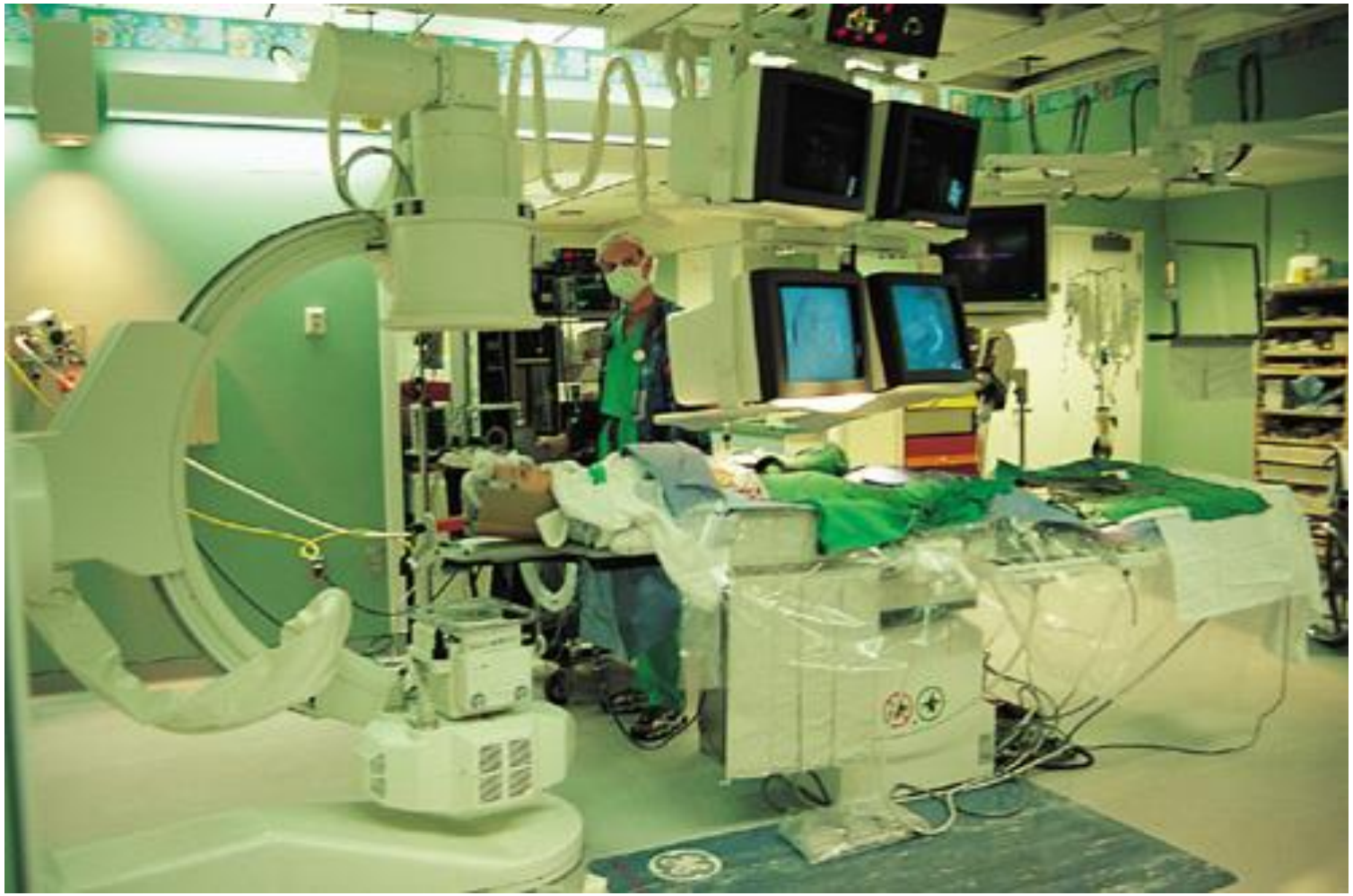
- High number of people waiting
- Obviously many of them are suffering

Strange airstreams, buttons, machines, lights with tubes and wires in his/her body

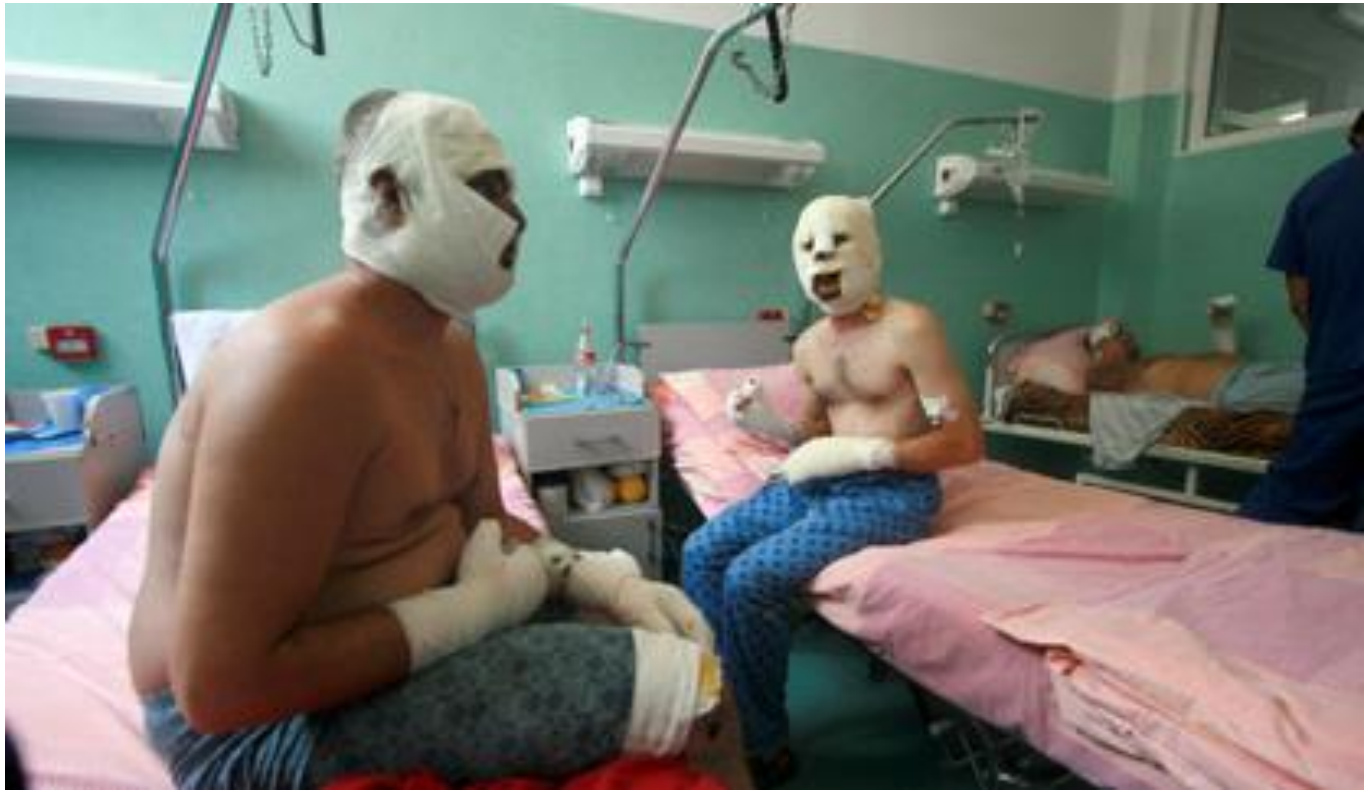
Surrounded by an army of nurses, helpers, doctors, assistants, physiotherapists and medical students



Transferred to special examination laboratories with blinking lights, strange voices and the personnel is unknown



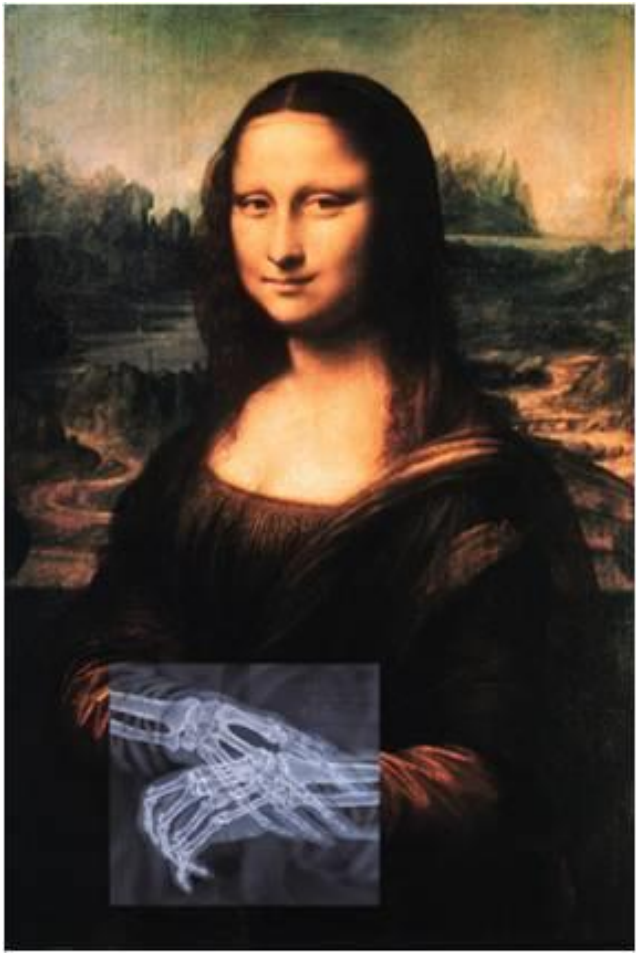
Forced to share the ward with other patients, who also have their own health and other problems



4. Medicine as an art

- professional knowledge
- intuition
- experience
- judgment
- the secret of personality

„Sometimes it is more important who has the disease than the disease itself”



86 year old female patient

Previous diseases:

1957. Extrauterine gravidity

1970. Hemorrhoid operation

1992. Hypertension, hypercholesterolemia

1996. Cholelithiasis. Not operated yet.

1997. Vertigo, Transient cerebral ischemic attack

Present complaints:

Vertigo, weakness, nausea repeated vomiting. No abdominal pain. Good appetite, no weight loss. No black or blood-tinged stooll. No obstipation. Normal body temperature.

Physical examination:

Small ankle edema on both sides. Pulmonary emphysema. RR: 150/70 mmHg, P: 88/min, reg., aequ. Abdomen palpable, mild tenderness in the RUQ. No pathological mass. Slight hepatomegaly, spleen not palpable. Rectal digital examination: negative.

Laboratory findings

- We: 39 mm/ó, RBC: 4,26 M, htc: 0,39, hgb: 115 g/l, MCV: 91,5 fl, WBC: 7050, PLT: 481000, serum iron: 7,8 uM/l (lower limit of normal), TIBC: 53,9 uM/l, Sat: 14%, stool blood test: 5 times negative.

Still – occult bleeding?

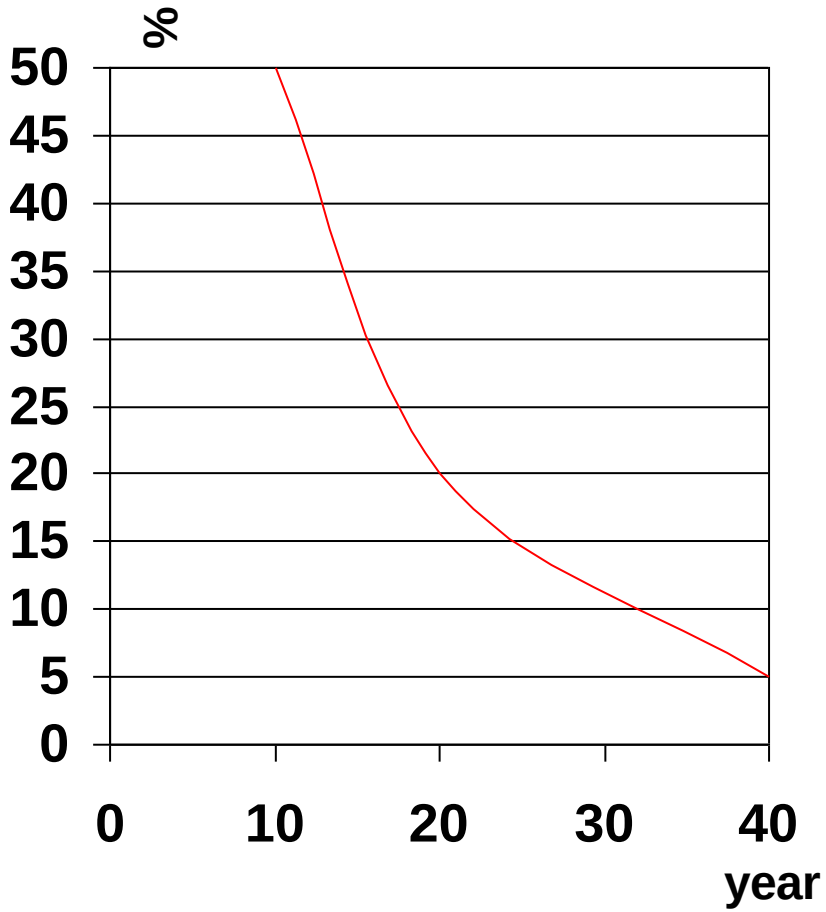
- Gynecologic examination: negative.
- Abdominal US: Apart from a gallbladder of 1 cm diameter, negative.
- Gastroscopy: negative.
- Colonoscopy: in the ascendent colon a 2-3 cm long, ulcerated tumor, bleeding surface, causing an almost complete luminal obstruction. Histology: adenocarcinoma. Incidental finding: diverticulosis and one polyp in the sigma (removed).

Having the Dx, again:

- - „Did you have no complaints with defecation or abdominal discomfort , indeed?”
- - „Yes, thus recalling it I had mild constipation in the past weeks (thus, posteriorly!).

5. Continuous Professional Education (CPE) = lifetime learning

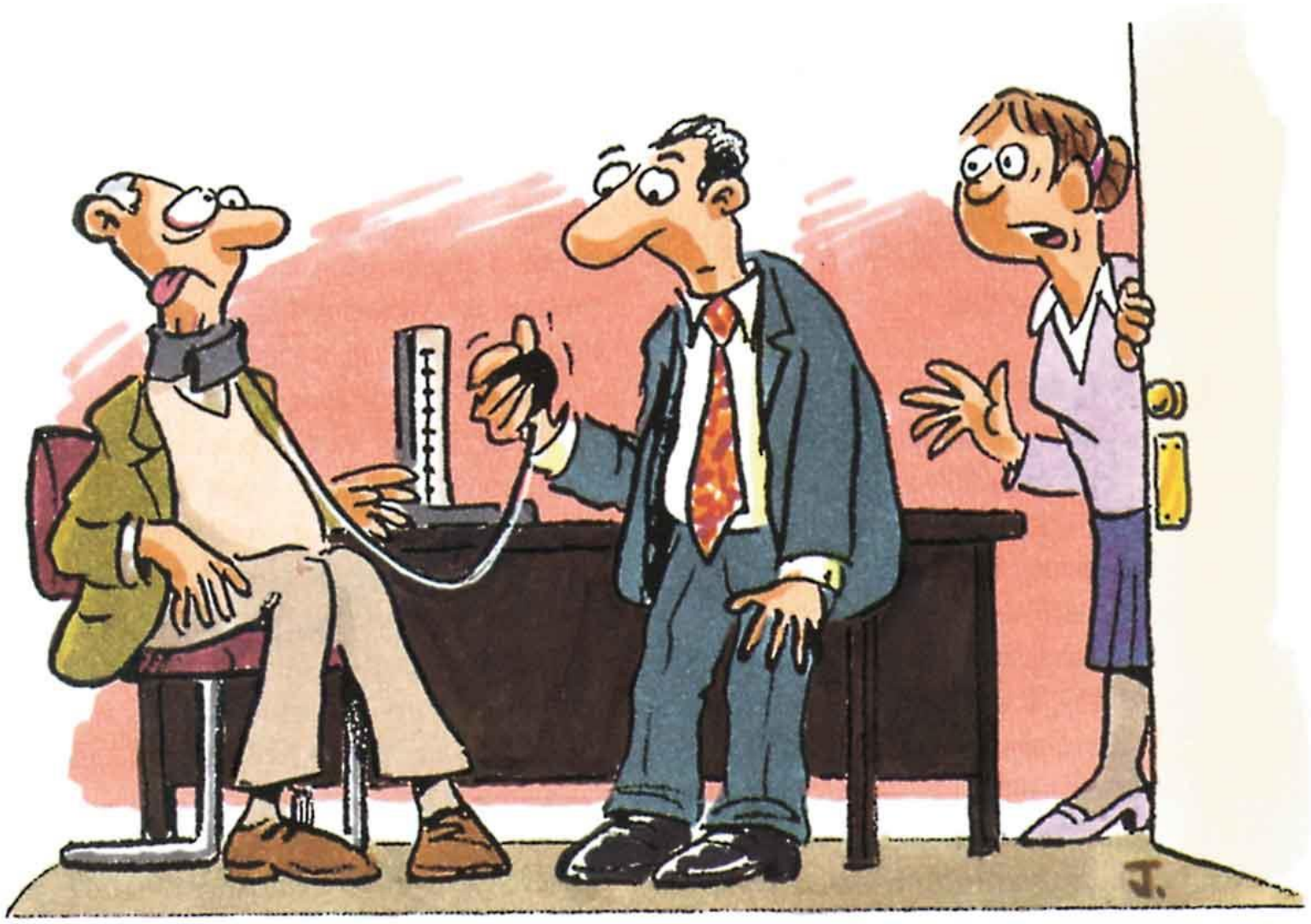
- our knowledge is not and will never be complete
- but individual experience increases!
- joyful → we will be able to increase our knowledge for the benefit of patients
- worrying → we shall never know as much as we wanted or we needed → inspires to learn and gain more experience



CPE is a duty

- form ethical and professional points of view
- obligatory by regulations (working license)

Something about learning new skills, acquiring and applying knowledge!



6. Organization - Levels of Health Care

Primary care

Secondary care

- Outpatient
- Inpatient

The importance of disease prevention and health promotion

- healthy lifestyle education
- vaccinations
- use of screen tests
- high risk patient identification and education
- screening of family members
- combating home and workplace environmental hazards

Processes leading to depersonalization in health care

1. Strong efforts to cut ever increasing costs
2. Increasing number of managed health care systems in which patients hardly have opportunity to choose doctor
3. Ever increasing reliance on technology and computerization
4. Increasing geographical mobility of patients and doctors
5. Several doctors are needed to care severe and complicated cases
6. Increasing need of patients to call for dissatisfaction with health care even at the court.

Systems of patients care beyond the millennium

The evolving changes in the health care delivery system unavoidably affect the perceived historical independence of thought and action

Financing of health care has become the key issue

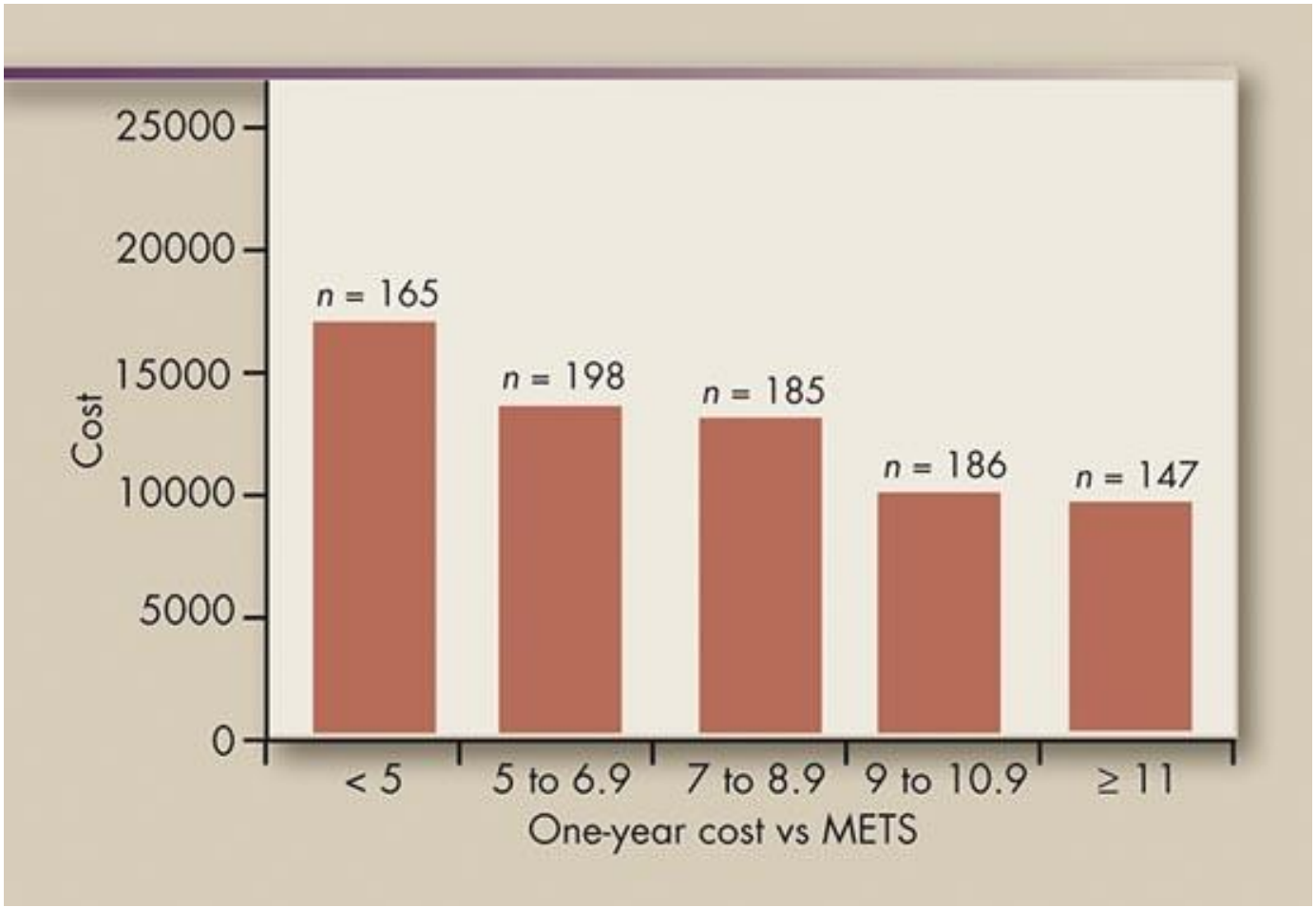
- Aging of population
- Decreasing number of active workers
- Sheer mass of GDP spent on health care
- Increasing costs ascribed to technology and professional sub-specialization
- Patient care in the mass is becoming a big business
- Insurers – „covered lives” (patients)
- Implementation of guidelines in order to increase cost-effectiveness

No country seems to be fully satisfied with its health care system, and experimentation abounds

The cost of obesity in the USA

- Total cost: 117 billion $
- Direct costs (preventive, diagnostic and therapeutic activity, in- and outpatient care, drugs): 61 billion $
- Indirect costs (loss of salary and dropout of production): 65 billion $
- 9% of total health care budget
- 17% of cardiovascular disease budget
- Increase of hospital costs:
  - 1979-1981: 35 million $
  - 1997-1999: 127 million $

Inverse relationship between fitness and health care costs (USA, n = 881)



Source: Images MD, Gibbons L et al in Atlas of Heart Diseases (2006)

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Thank you for your attention!