



**RADIOLÓGIA VIZSGAKÉPEK**  
**RADIOLOGY MUST SEE IMAGES**  
**RADIOLOGIE PRÜFUNGSBILDER**

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**SEMMELWEIS EGYETEM RADIOLOGIAI KLINIKA**  
**2018**

1.



1.



- Natív CT / Nonenhanced CT
  - Elmosódott cortex-fehérállomány határ az ödéma miatt/Cortical-subcortical border disappeared/blurred due to oedema
  - Hiperdenz media-jel (Gács-jel; *nyíl*) / (Gács') hyperdense media sign (*arrow*)
- **Dg.: Szubakut ischaemia a jobb a. cerebri media területén /**  
**Diagnosis: Subacute ischaemia in territory of right middle cerebral artery**

2.



10



2.



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- CT (natív), agyi ablakolás (ablakközép: 40 HU, ablakszélesség: 80 HU) / CT (unenhanced), brain window setting (window center: 40 HU; window width: 80 HU)
- A jobb a. cerebri media területén / In territory of right middle cerebral artery
- **Dg.: Régi ischaemia jobb oldalon / Diagnosis: Ischaemic lesion in chronic phase on the right side**

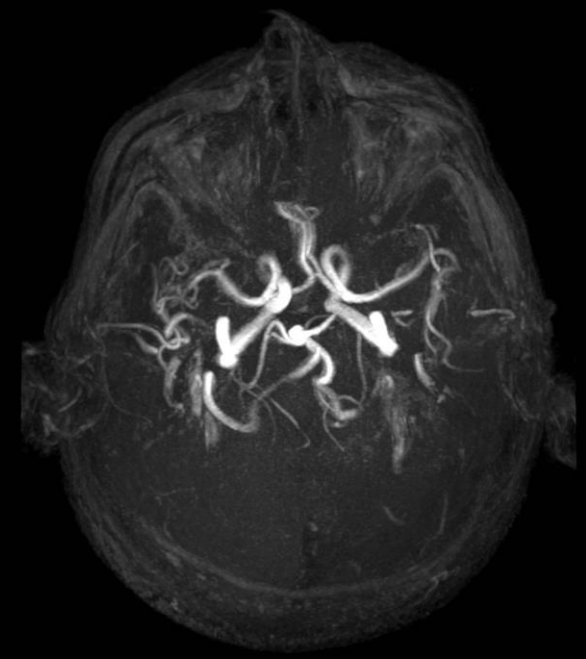
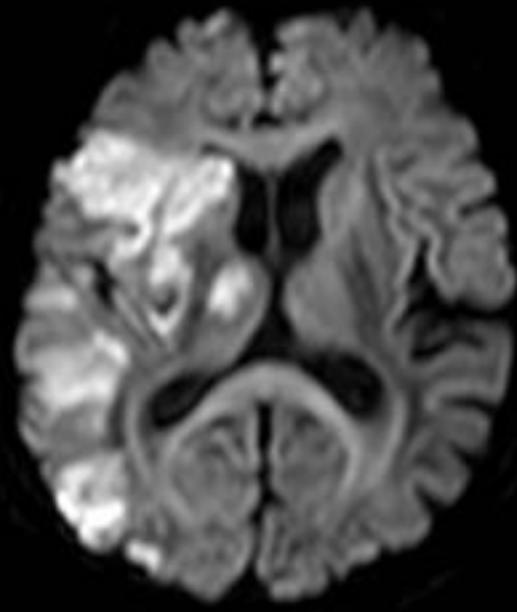
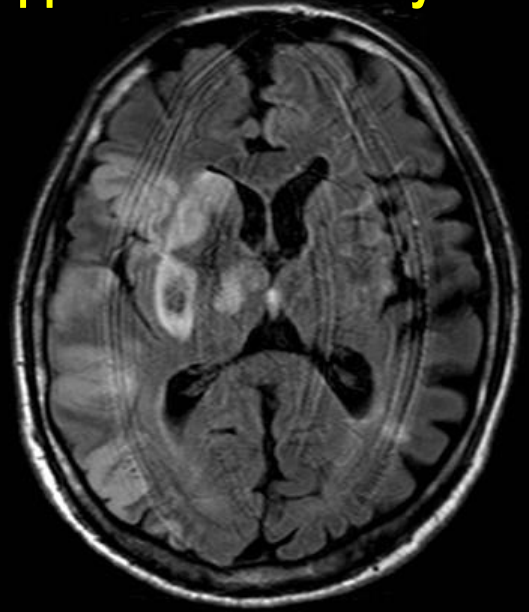
**3.** 1. nap / First day



3 nappal később / 3 days later



3 nappal később / 3 days later

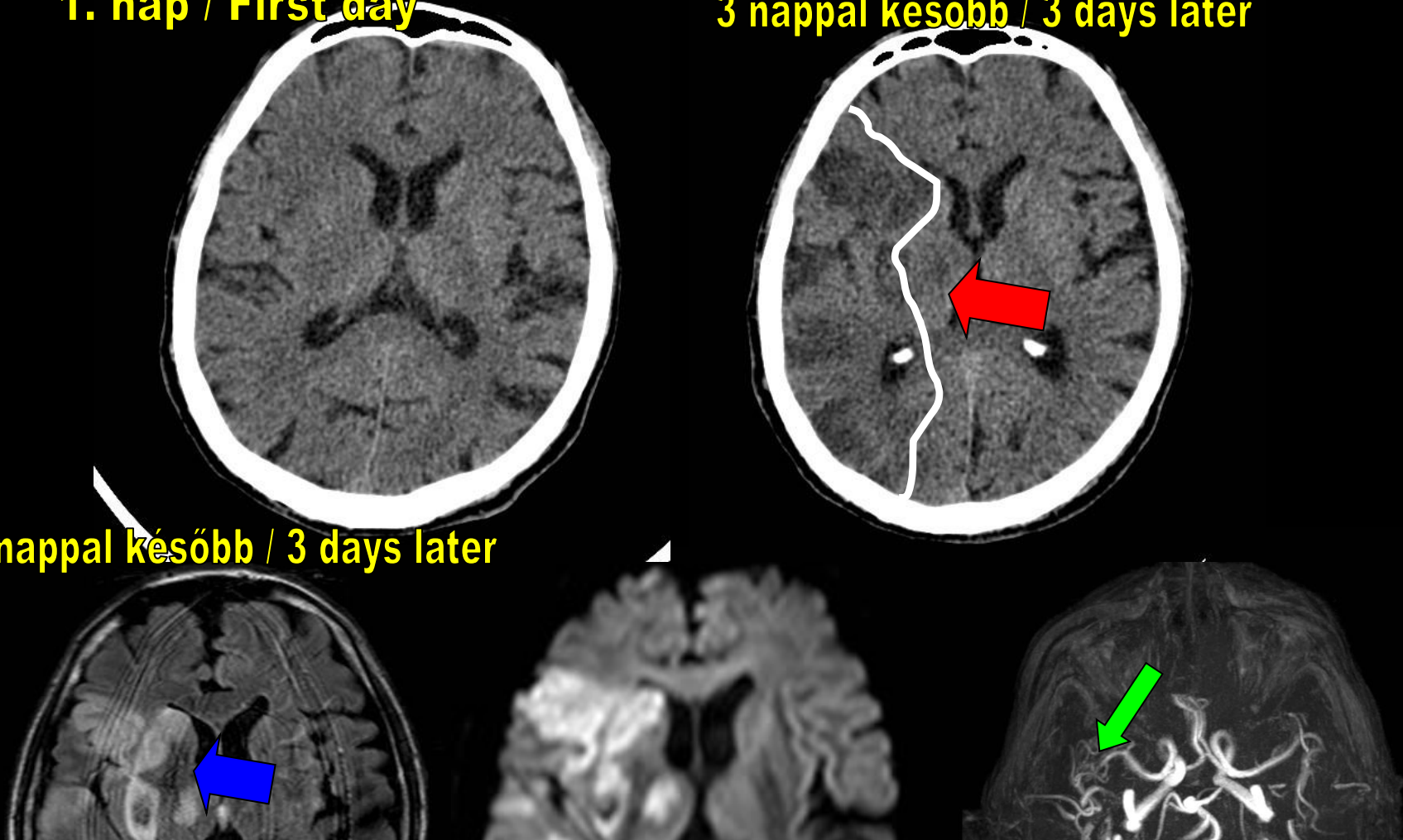


3.

1. nap / First day

3 nappal később / 3 days later

3 nappal később / 3 days later



• Fenn: Natív axialis síkú koponya CT, alul: FLAIR, DWI és MRA felvételek (alul) / Up: Non-enhanced brain CT, axial slices, Down: FLAIR, DWI and MRA images

• Első koponya CT negatív (fenn, bal kép), 2 nappal későbbi (fenn, jobb oldal): subacut ischaemia a jobb a. cerebri media területén hypodens területekkel (*piros nyíl*) / First CT is normal (up, left image), 2 days later (up, right image): subacute ischaemic lesion in the right MCA territory with hypodens areas (*red arrows*)

• MR felvételeken FLAIR-en magas jeladású területek (bal kép, *kék nyíl*), diffúziógátlás a DWI felvételen a jobb ACM területén (középső kép), 3DSENSE képeken telődési kiesés a jobb ACM területén (*zöld nyíl*) / High intensity areas in the right MCA territory (left image, *blue arrow*), restricted diffusion in the right MCA territory (middle image), filling defect on the MCA (right image, *green arrow*)

• **Diagnózis: Jobb ACM területi subacut ischaemia / Diagnosis: Subacute ischaemic lesion in the right MCA territory**

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A



4.



- CT (natív) / CT (nonenhanced)
- Középvonali áttolás jobbra / Midline shift to the right
- Dg.: Akut parenchymális, kamrába törő hyperdens vérzés / **Diagnosis: Acute parenchymal & intraventricular hyperdens haemorrhage**

5.





5.

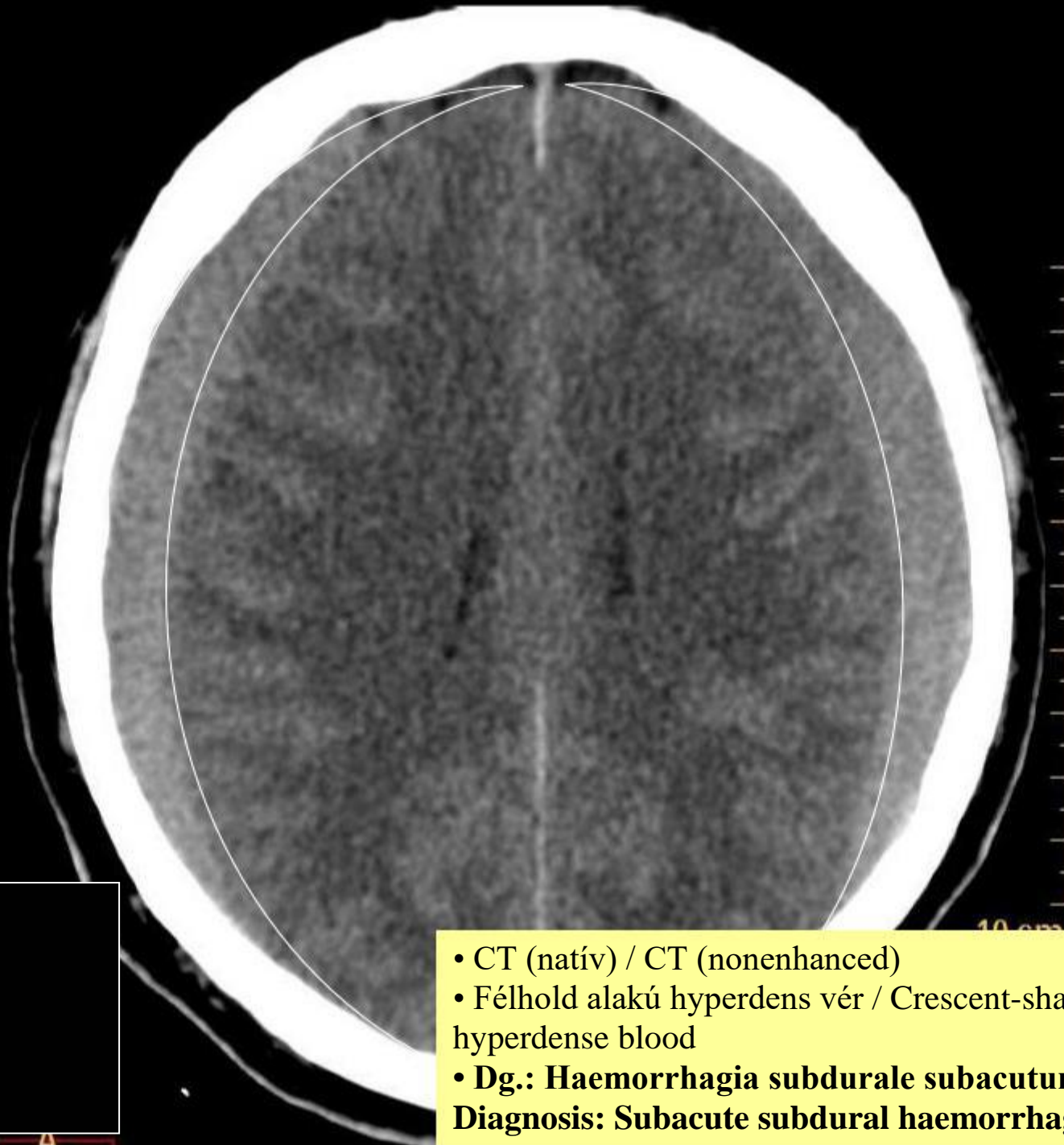


- CT (natív) / CT (unenhanced)
- Friss hyperdens vérzés a bazális cisternákban, sulcusokban / Acute hyperdens bleeding in basal cisterns and sulci
- Dg.: Haemorrhagia subarachnoidale acutum / **Diagnosis: Subarachnoid haemorrhage**

6.

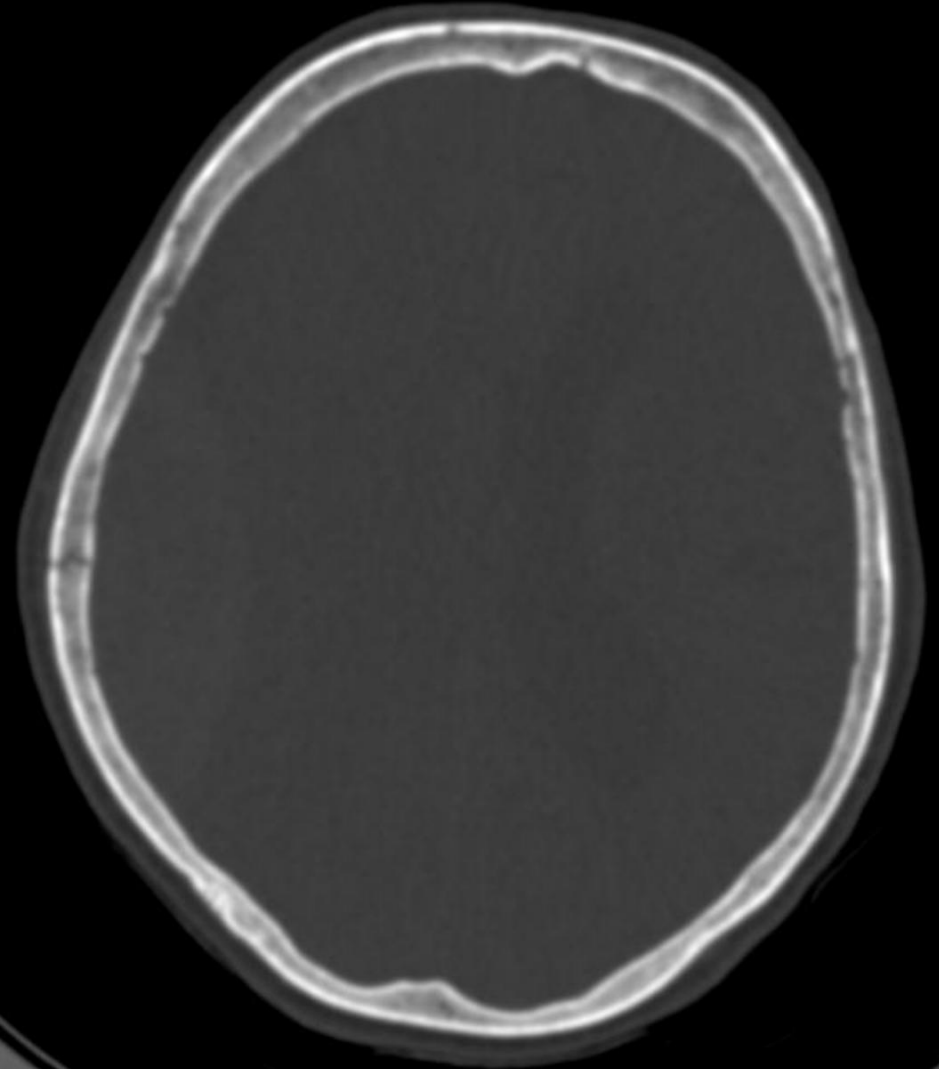


6.



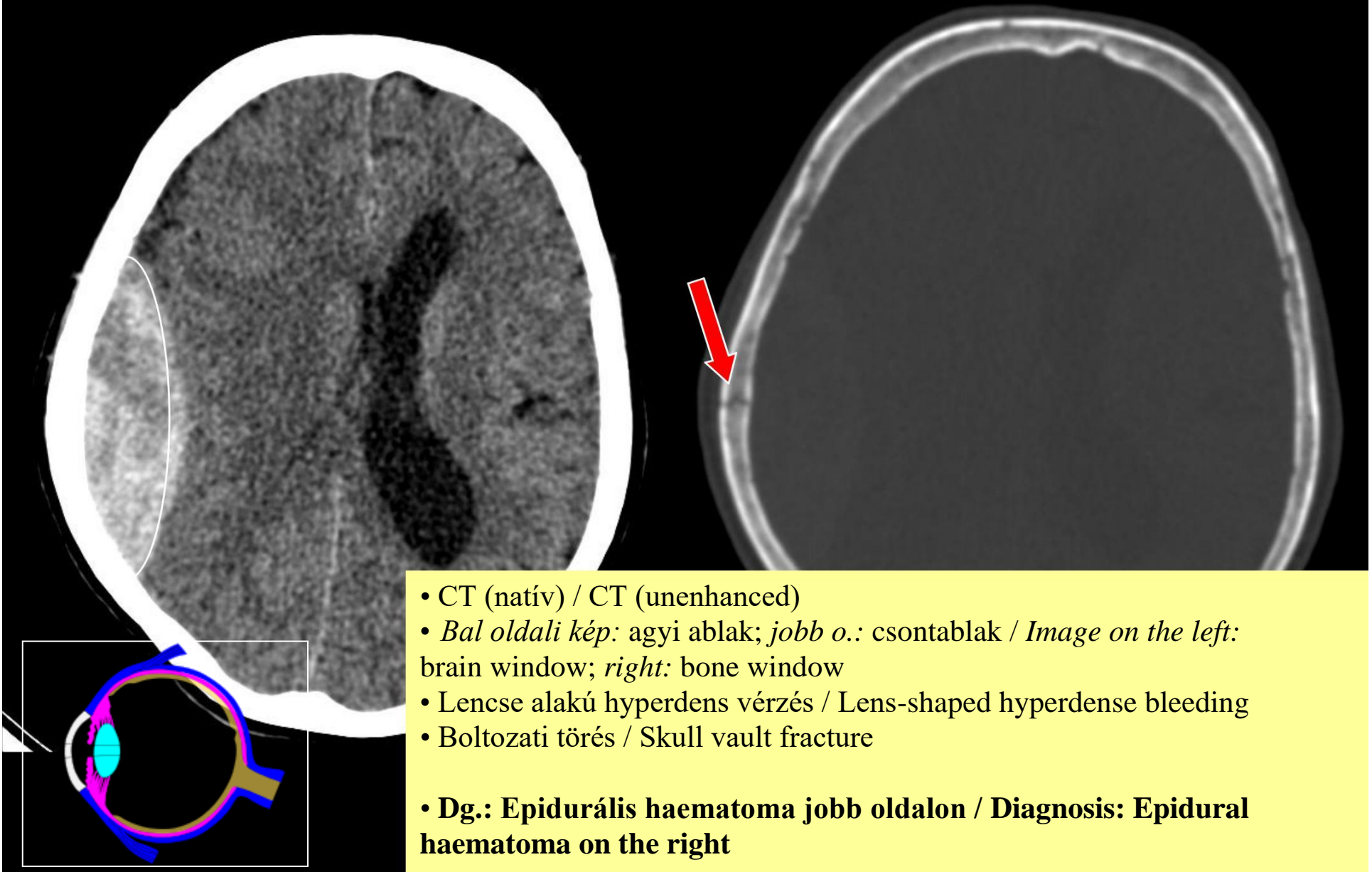
- CT (natív) / CT (nonenhanced)
- Félhold alakú hyperdens vér / Crescent-shaped hyperdense blood
- **Dg.: Haemorrhagia subdurale subacutum (kétoldali) /**  
**Diagnosis: Subacute subdural haemorrhage (bilateral)**

7.



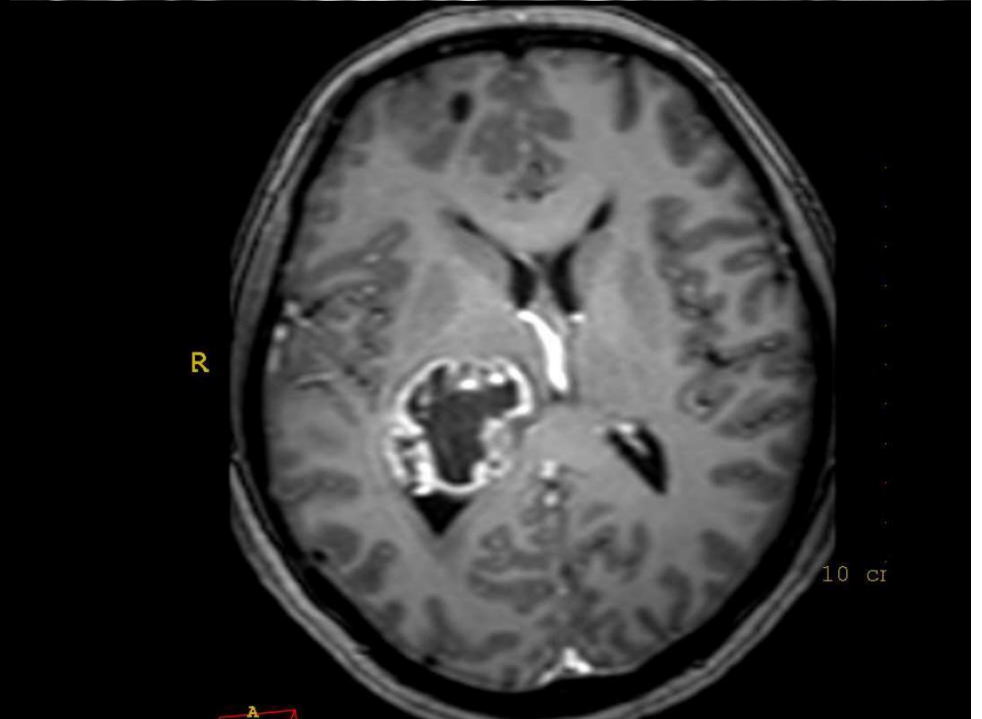
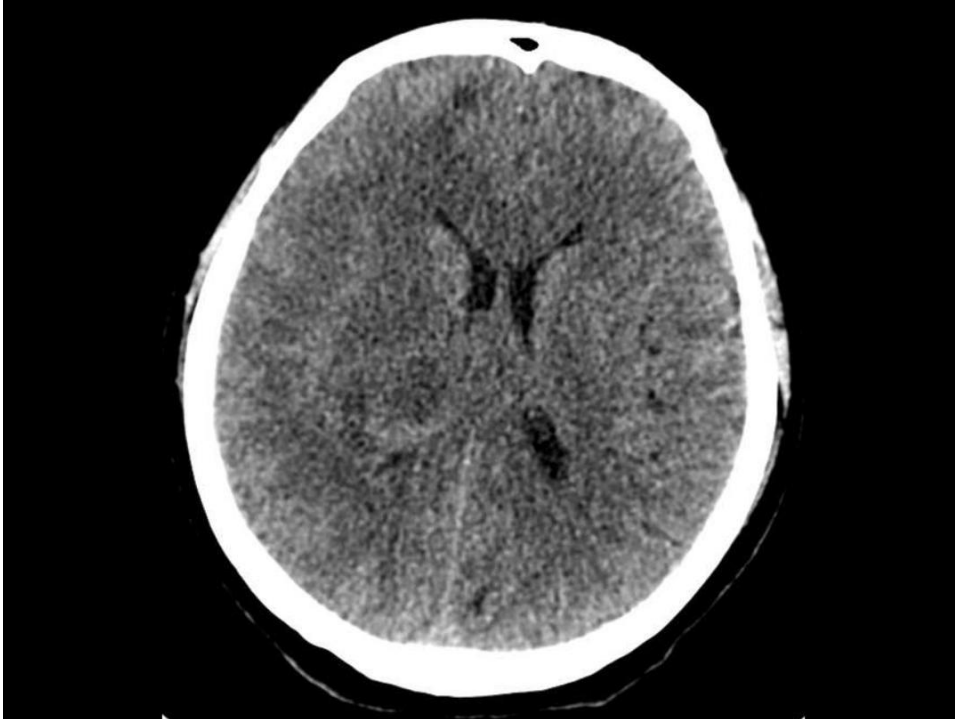
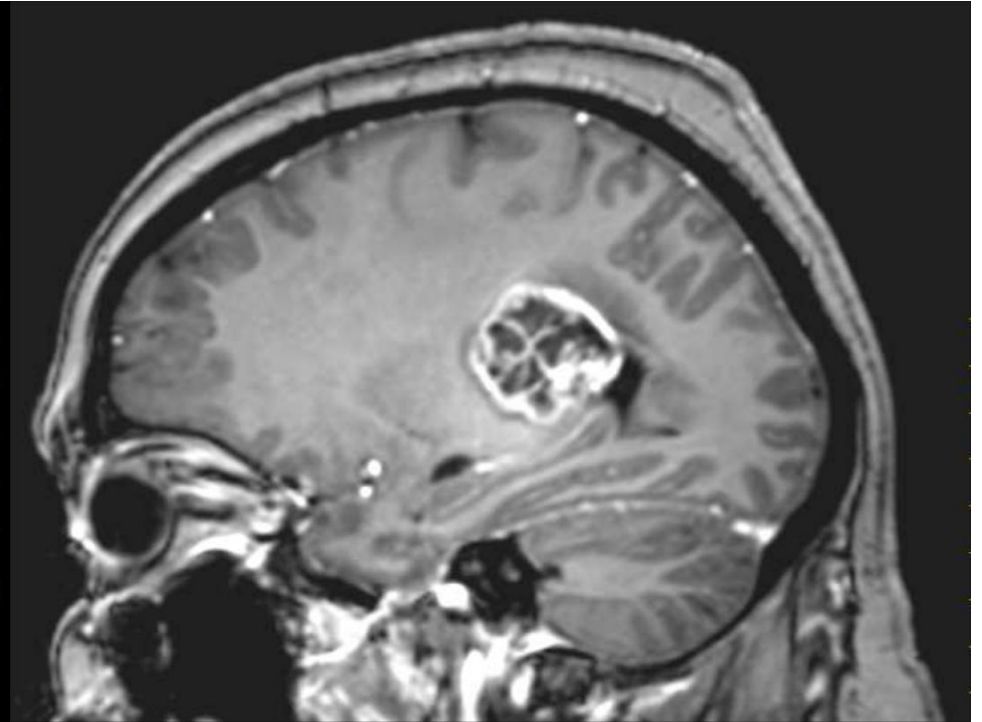


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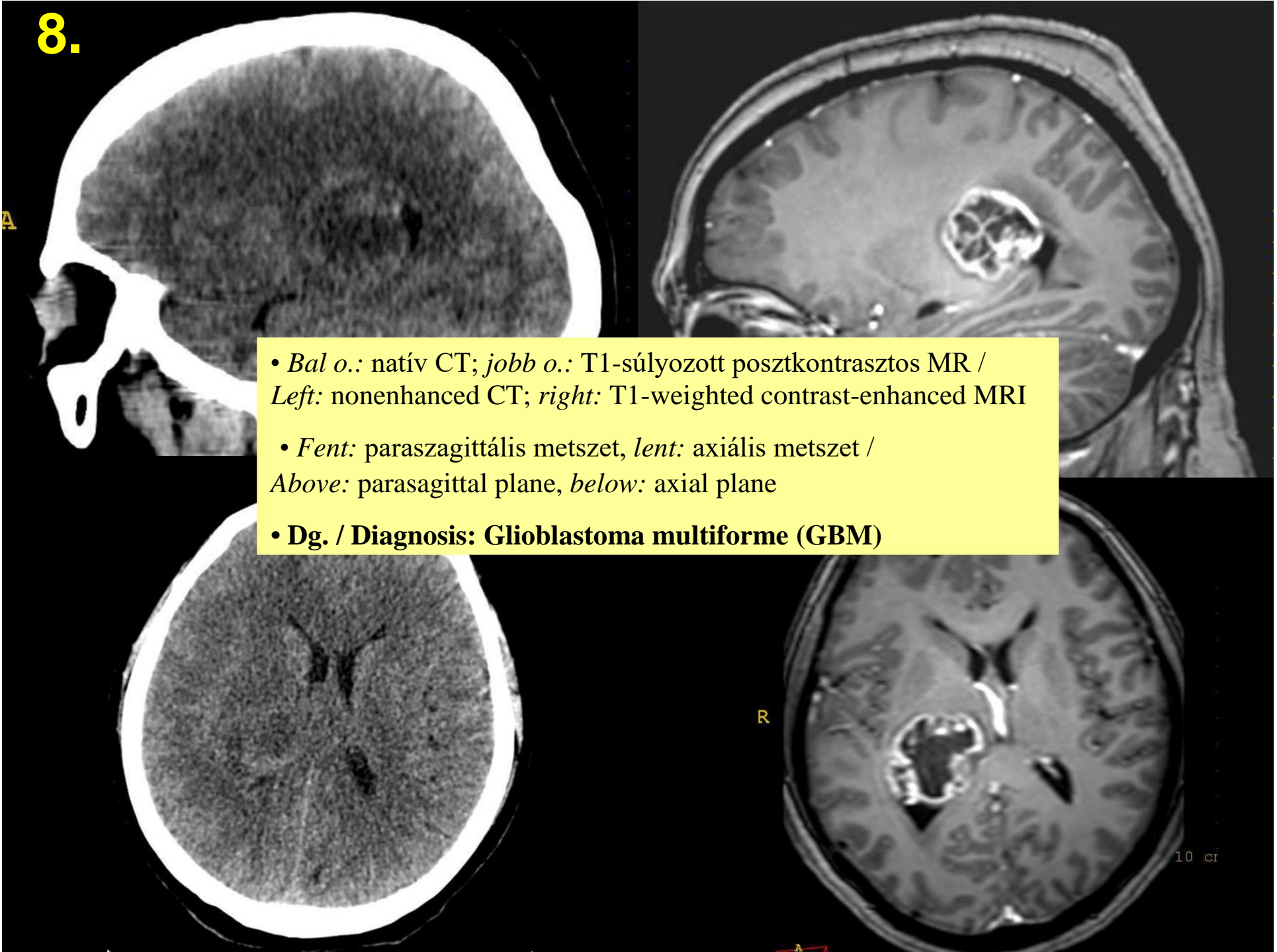
- CT (natív) / CT (unenhanced)
  - *Bal oldali kép: agyi ablak; jobb o.: csontablak / Image on the left: brain window; right: bone window*
  - Lencse alakú hyperdens vérzés / Lens-shaped hyperdense bleeding
  - Boltozati törés / Skull vault fracture
- **Dg.: Epidurális haematoma jobb oldalon / Diagnosis: Epidural haematoma on the right**

8.



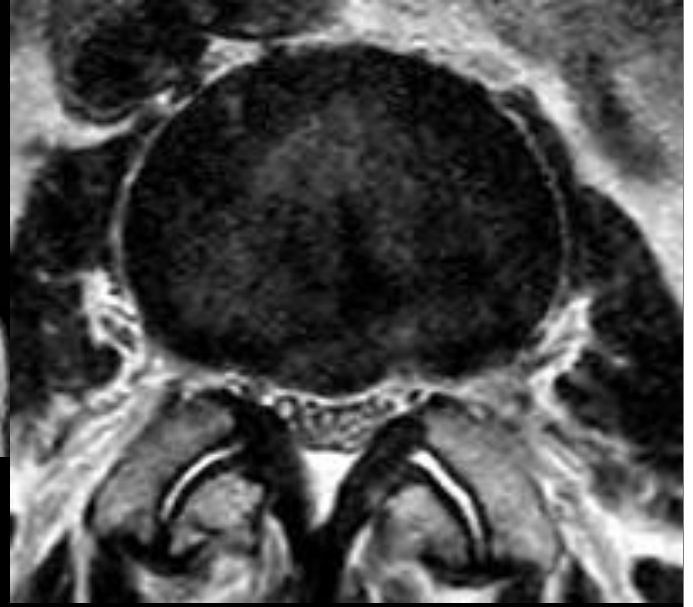
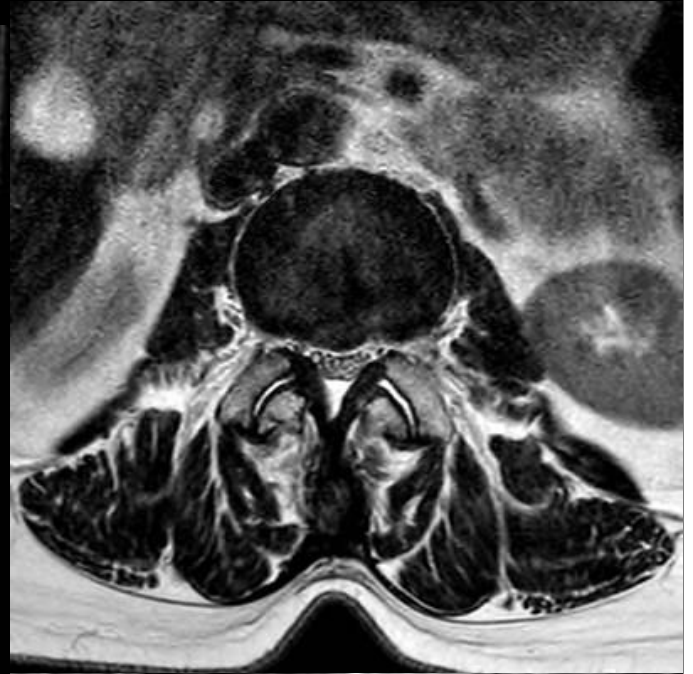


8.



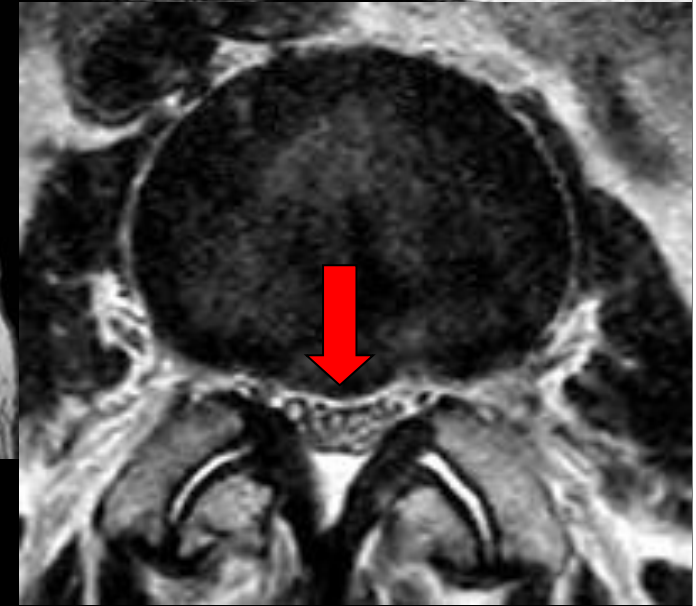
- *Bal o.:* natív CT; *jobb o.:* T1-súlyozott posztkontrasztos MR /  
*Left:* nonenhanced CT; *right:* T1-weighted contrast-enhanced MRI
- *Fent:* parasagittális metszet, *lent:* axiális metszet /  
*Above:* parasagittal plane, *below:* axial plane
- **Dg. / Diagnosis: Glioblastoma multiforme (GBM)**

9.





9.

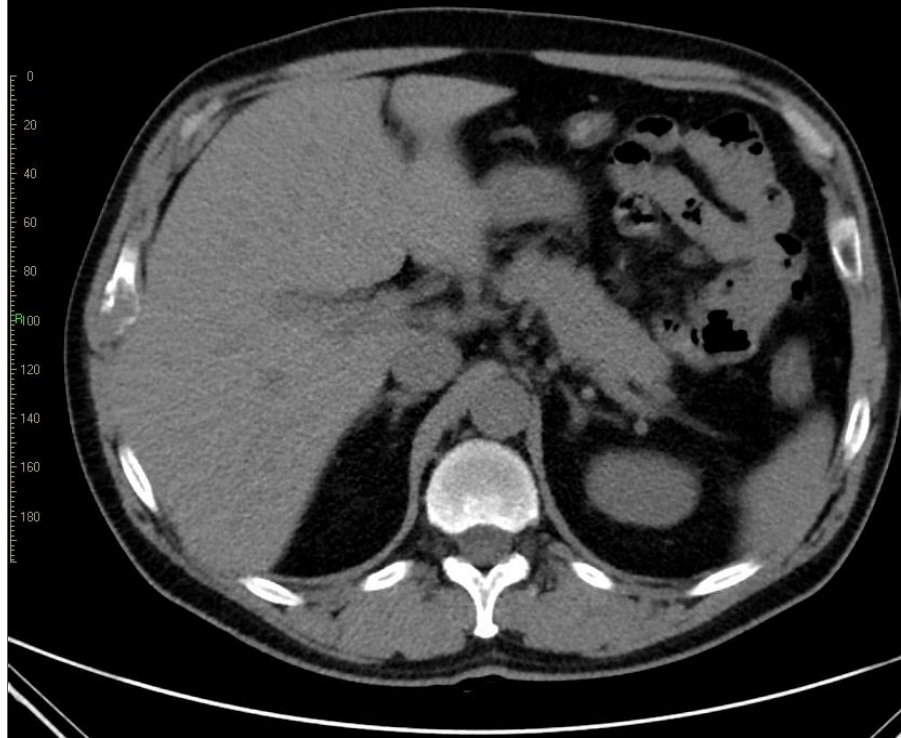


• Lumbalis MR (balról jobbra: T1 sagittalis, T2 sagittalis, jobb oldal: axialis T2 súlyozott képek) / Lumbal MRI (left: sagittal T1- and T2-weighted images, right: axial T2 weighted images)

• **Dg.: LII/III. között discushernia /  
Diagnosis: disc herniation between L2 and L3 level**

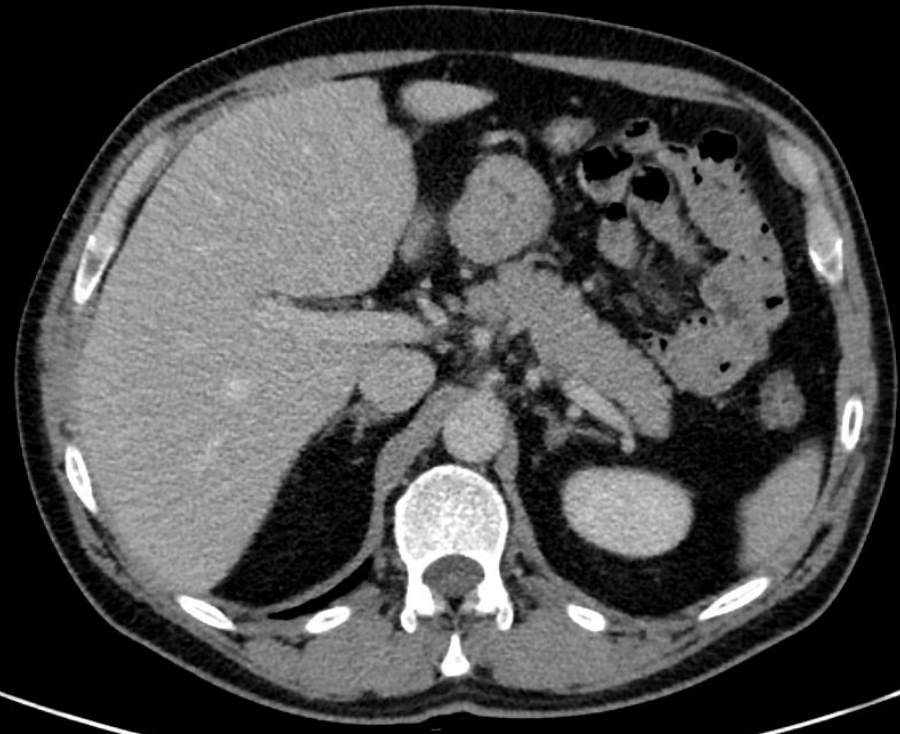
10.

Mellkas, has, kismencede CT vizsgalat  
512\*512  
CT



1.75 : 1  
way 1.75 : 1  
100%

P



1.75 : 1  
way 1.65 : 1  
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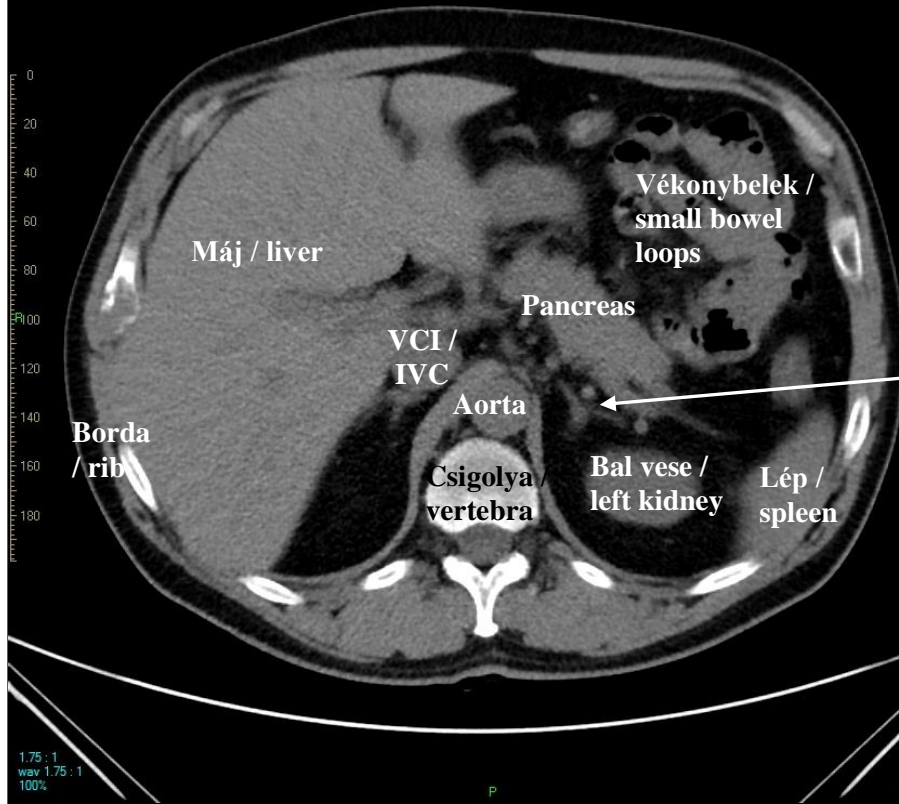
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Mellkas, has, kismencede CT vizsgalat  
512\*512  
CT

202/442  
VENAS



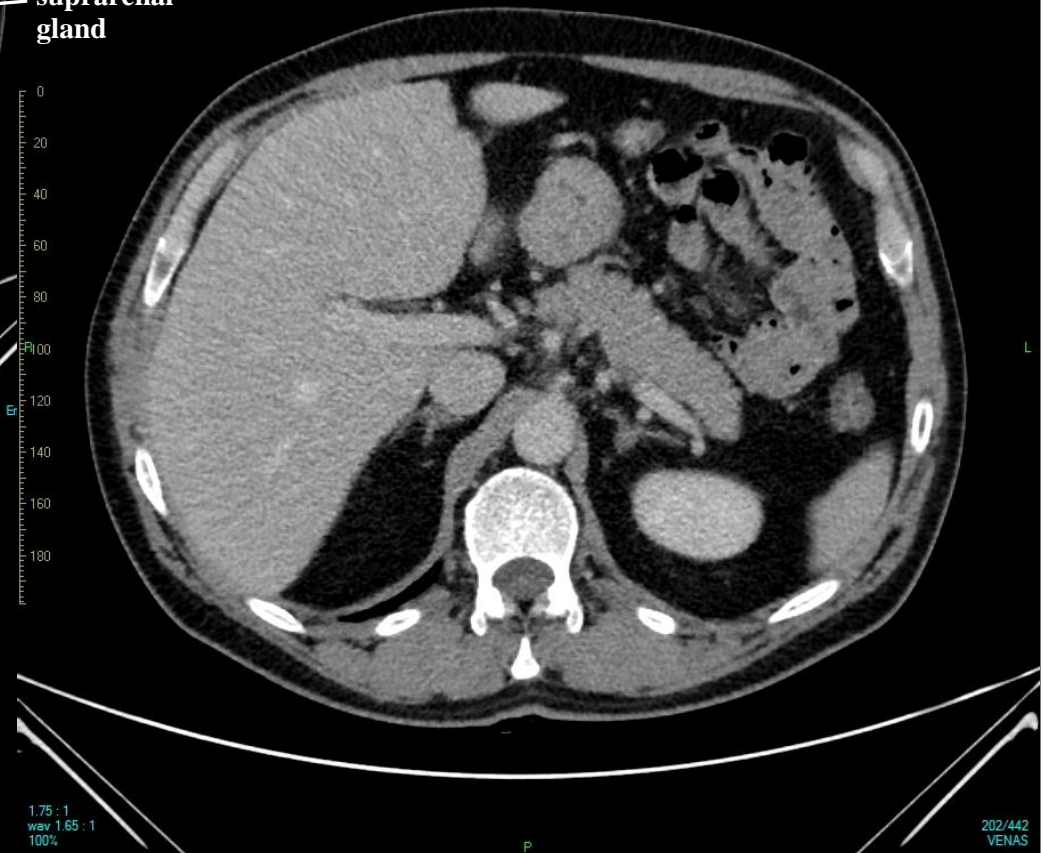
# 10. Natív / unenhanced



- CT (*natív*), axialis sík, hasi ablak / CT (*nonenhanced*), axial slice, abdomen window
- Felhasi lágyrészek, csigolya, bordák / Upper abdomen, vertebra, ribs
- **Dg.: Ép viszonyok / Diagnosis: No pathology**

# Kontrasztos (vénás fázis) / Contrast enhanced (venous)

Mellékvese /  
suprarenal  
gland



- CT (*kontrasztos*), ép viszonyok / CT (*contrast-enhanced*), normal
- Máj, pancreas, lép, bal vese, mellékvesék, v. cava inf. (VCI), aorta / Liver, pancreas, spleen, left kidney, suprarenal glands, inferior vena cava (IVC), aorta
- **Dg.: Ép viszonyok / Diagnosis: No pathology**

11.

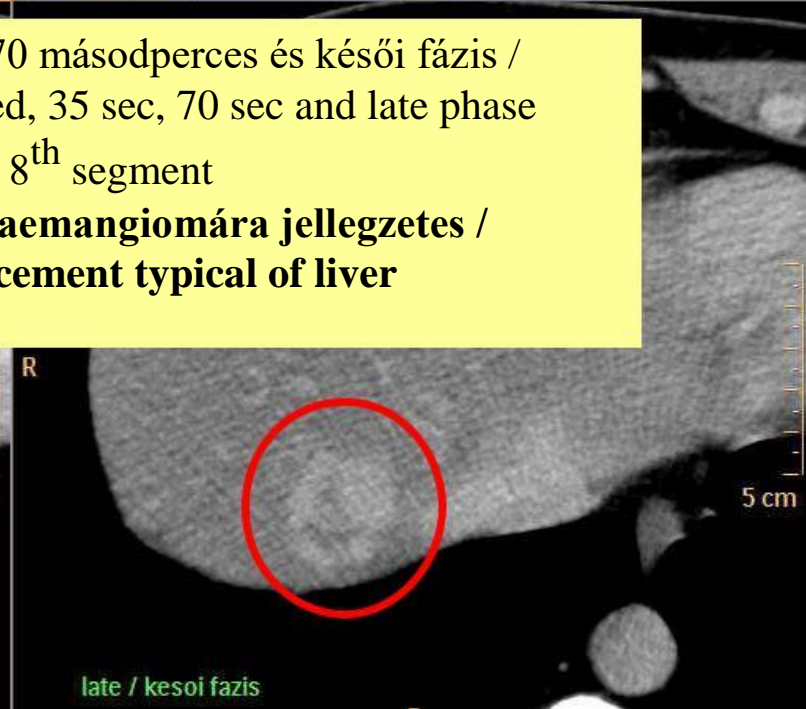
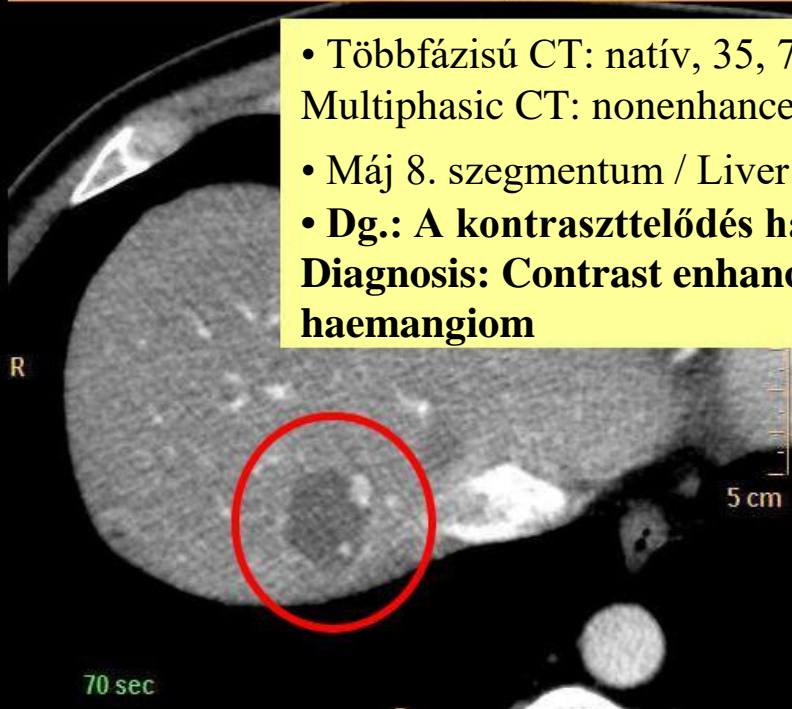




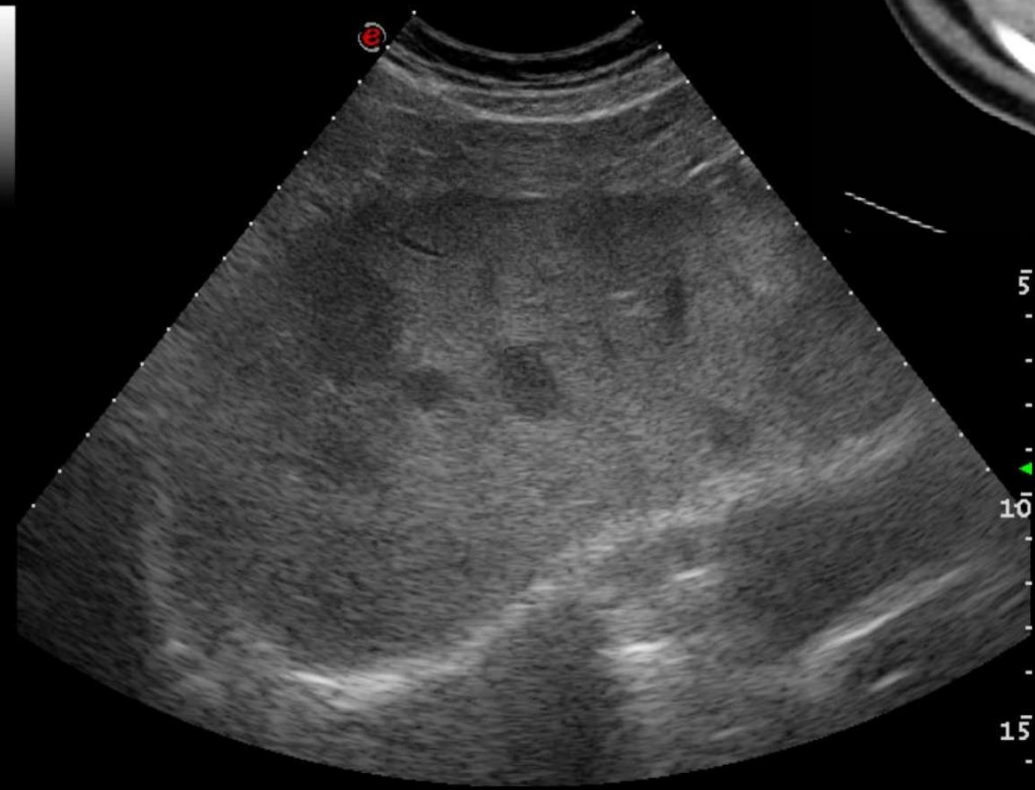
11.



- Többfázisú CT: natív, 35, 70 másodperces és késői fázis / Multiphasic CT: nonenhanced, 35 sec, 70 sec and late phase
- Máj 8. szegmentum / Liver 8<sup>th</sup> segment
- **Dg.: A kontrasztelődés haemangiómára jellegzetes /**  
**Diagnosis: Contrast enhancement typical of liver haemangiom**

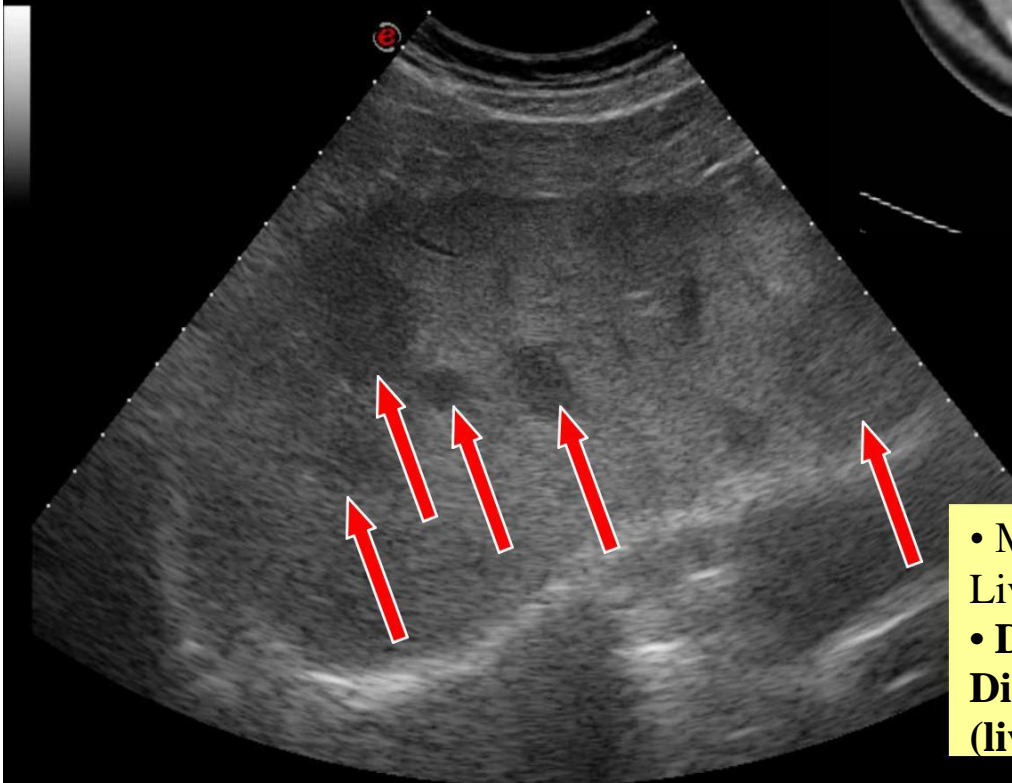
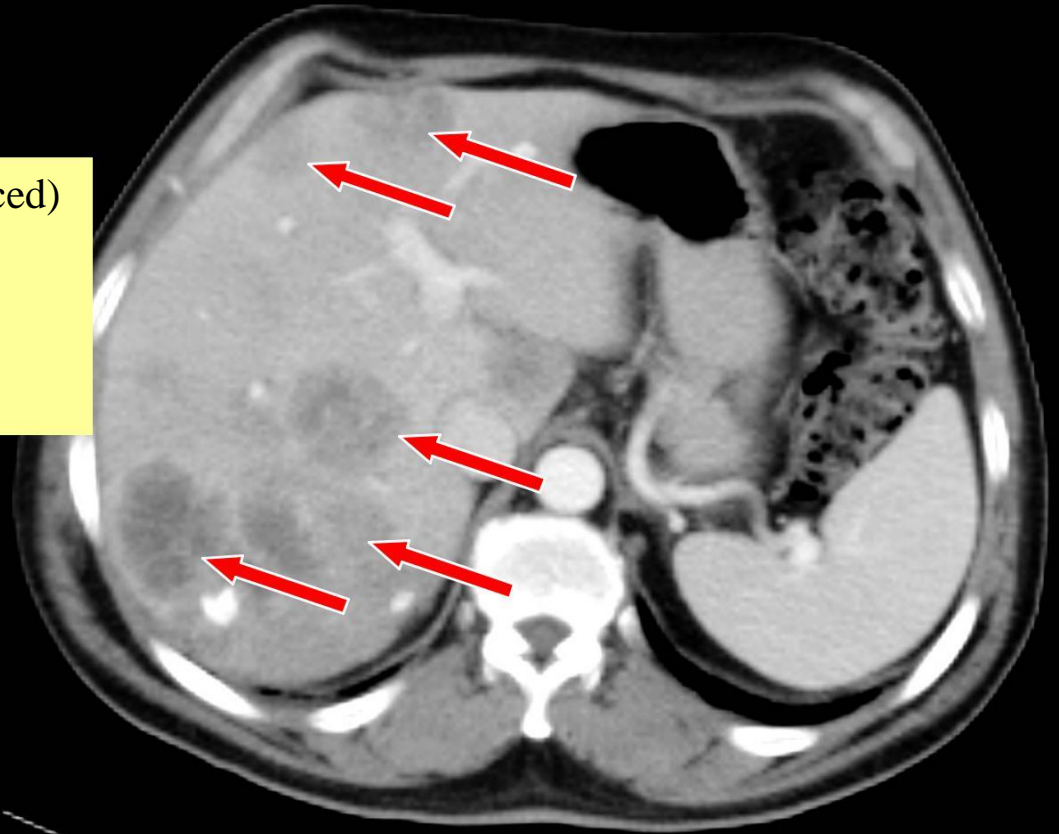


12.



# 12.

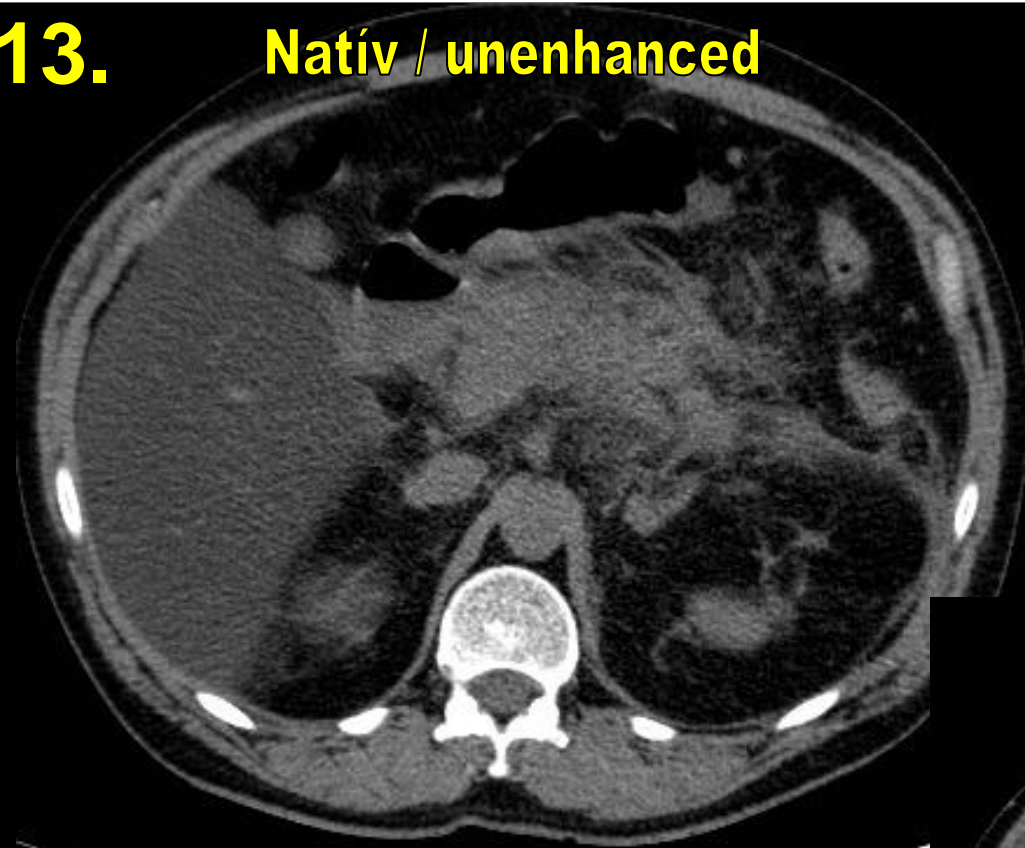
- CT (iv. kontrasztdúsított) / CT (contrast-enhanced)
- A lép szabályos / Normal spleen
- **Dg.: Metastasis hepatis multiplex /**  
**Diagnosis: Multiple liver metastases**



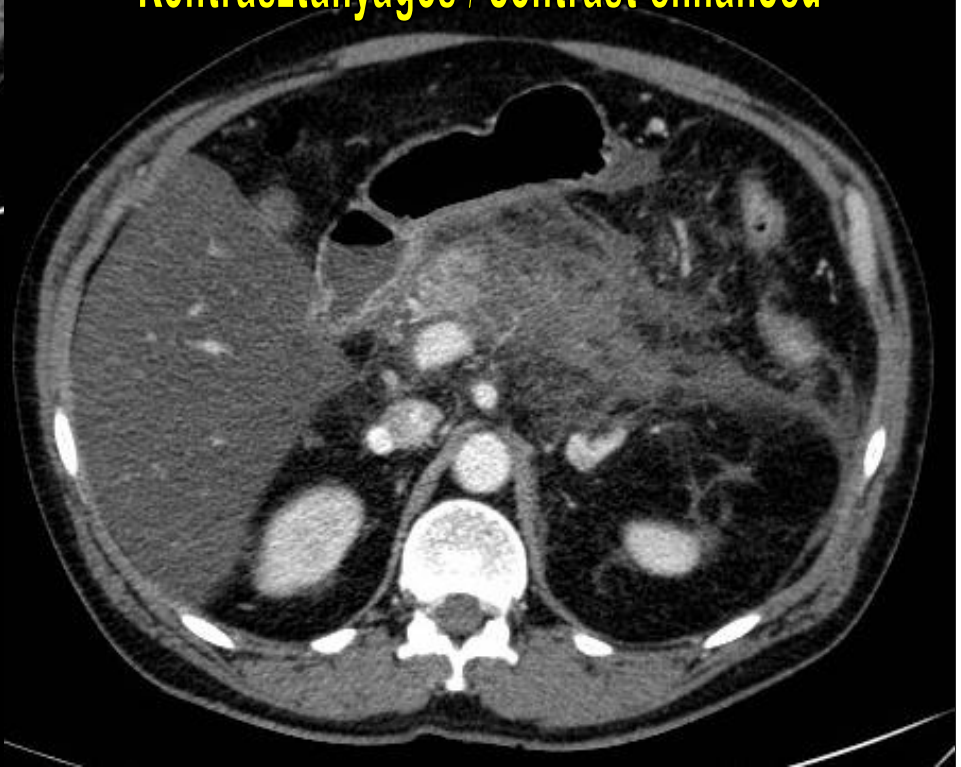
- Májultrahang, konvex transzducer (3,5–5 MHz) /  
Liver ultrasound with convex probe (3.5–5 MHz)
- **Dg.: Multiplex echószegény léziók = májmet. /**  
**Diagnosis: Multiple hypoechogenic foci**  
**(liver metastases)**



**13. Natív / unenhanced**

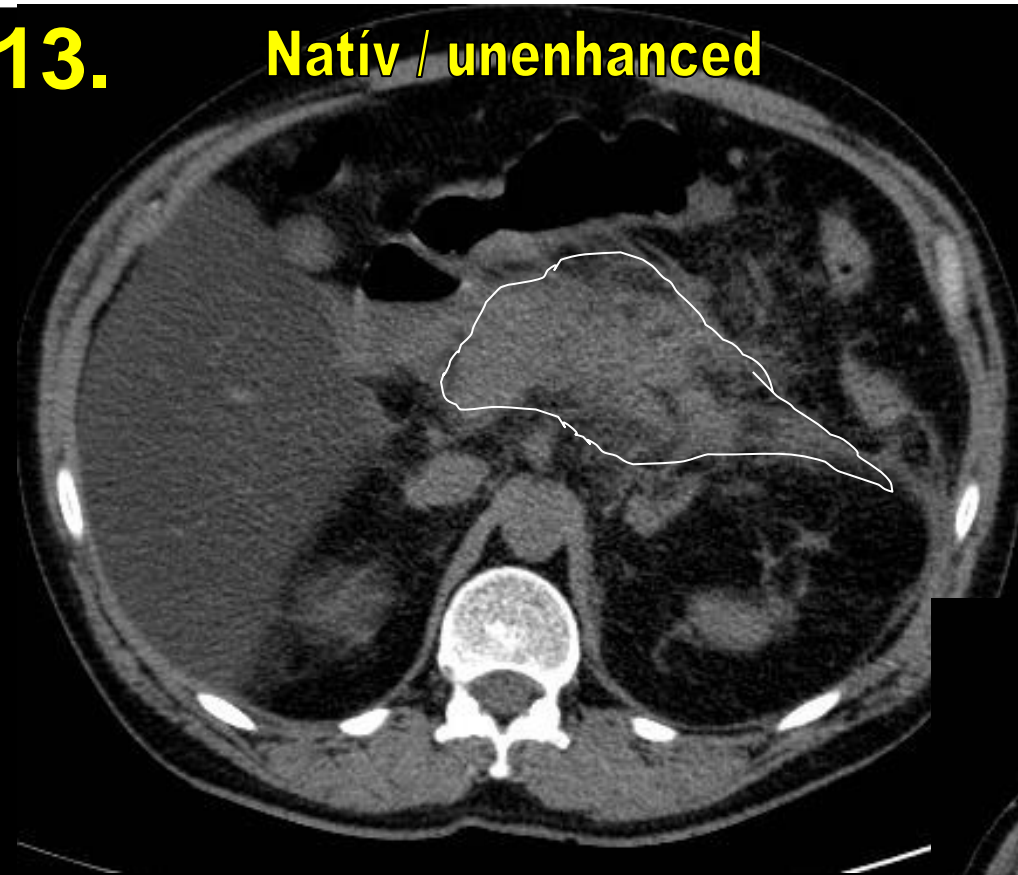


**Kontrasztanyag / contrast enhanced**

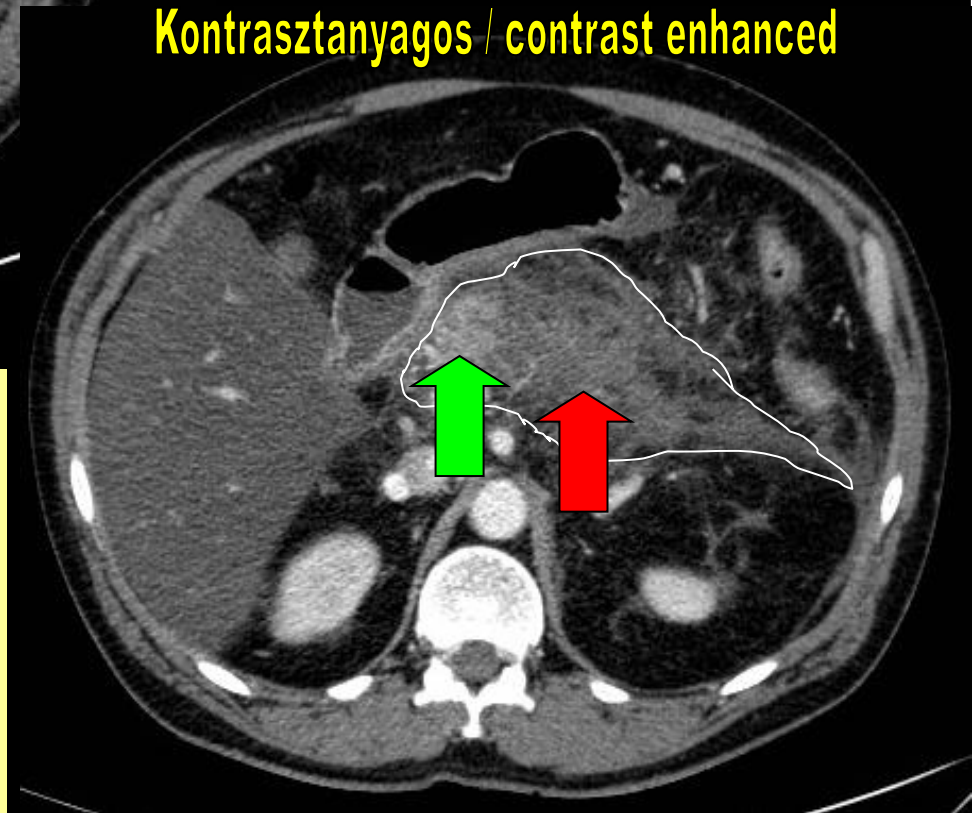


13.

Natív / unenhanced



Kontrasztanyag / contrast enhanced



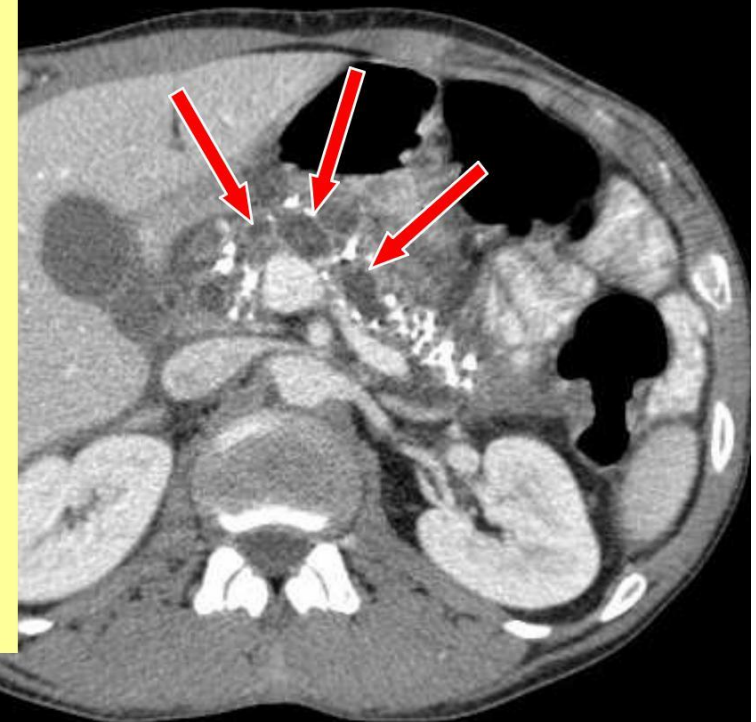
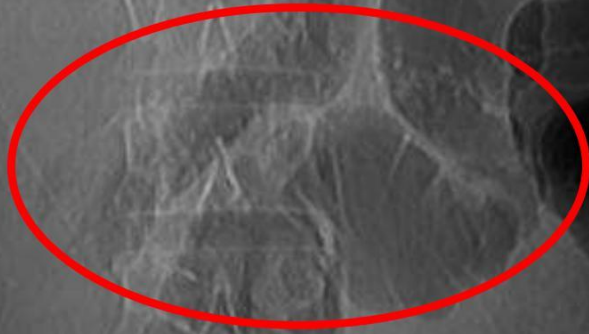
- CT (Bal o.: natív, jobb o.: kontrasztdúsított) / CT (left: unenhanced, right image: contrast-enhanced)
- Test hypodens = nekrotizált (*piros nyíl*); fej halmoz = élő szövet (*zöld nyíl*) / Body hypodense = necrotic (*red arrow*); head enhancing = viable (*green arrow*)
- Dg.: Pancreatitis acuta /  
**Diagnosis: Acute pancreatitis**

14.



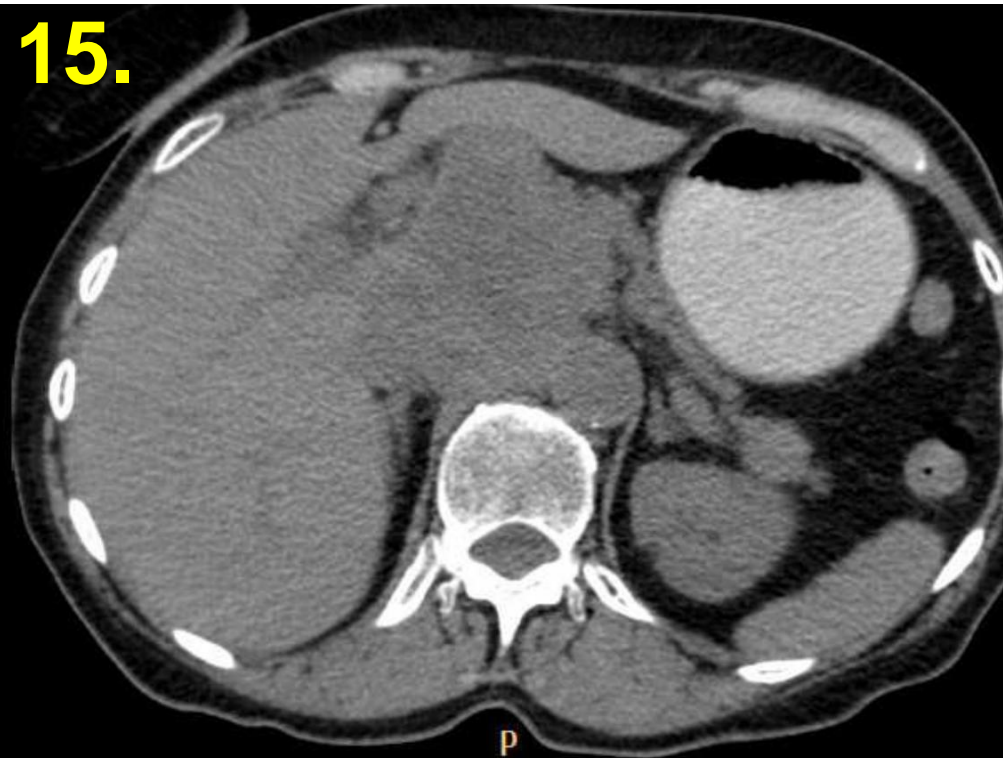


14.

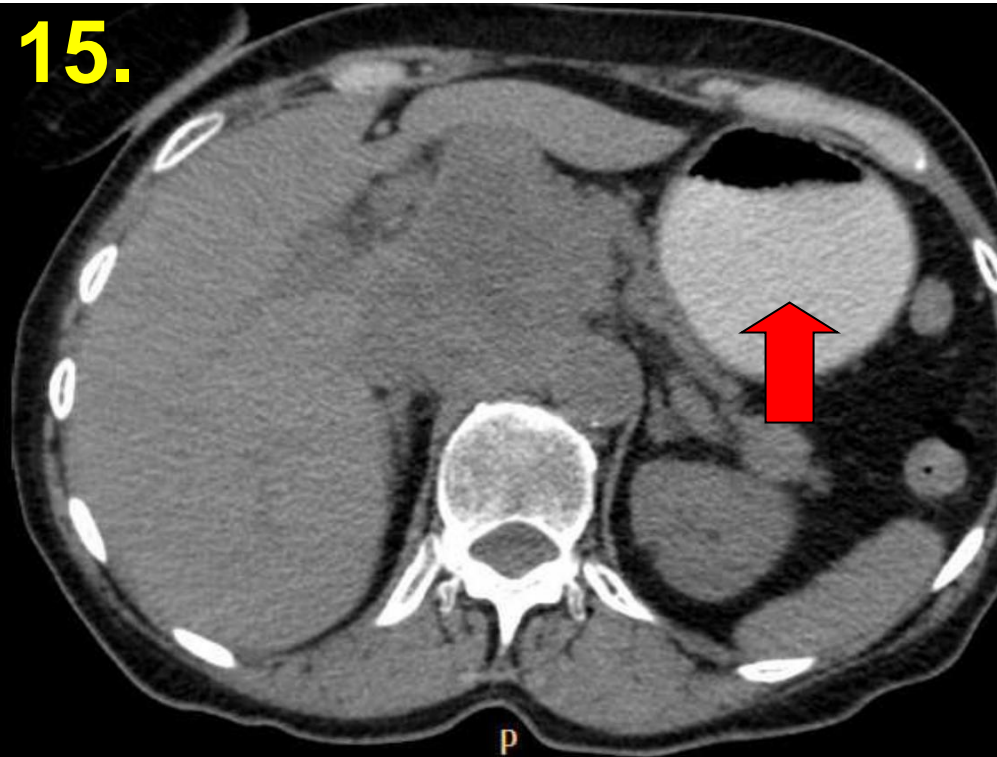


- *Bal o.:* CT-topogram / *Left:* CT scout view
- *Jobb o. fent:* natív CT-kép / *Right side above:* nonenhanced CT scan
- *Jobb o. lent:* kontrasztos CT-kép / *Right side below:* contrast-enhanced CT scan
- Natív képeken: pancreasmeszesedés (*bekarikázva*) / On nonenhanced scans: calcification in pancreas (*ellipses*)
- A ductus pancreaticus maior egyenetlen tágulata (*nyilak*) / Beaded dilation of the pancreatic duct (*arrows*)
- **Dg.: Pancreatitis chronica / Diagnosis: chronic pancreatitis**

15.



15.



- CT (natív, axiális szelet) / CT (unenhanced, axial view)
- Per os kontrasztanyag a gyomorban (*piros nyíl*) / Oral contrast material in the stomach (*red arrow*)

- CT (kontrasztos) / CT (contrast-enhanced)
- Tumor közepe hipodenz = nekrotikus / Hypodense tumour centre: necrosis
- **Dg.: Infiltratív pancreasfeji térfoglalás: malignus tumor / Diagnosis: Infiltrative mass in pancreatic head: malignant tumor**





16.

Abd Gen  
C5-2  
31Hz  
15,0cm

+ Length 1,71 cm

P

2D  
HGen  
Gn 60  
56  
3 / 3 / 3



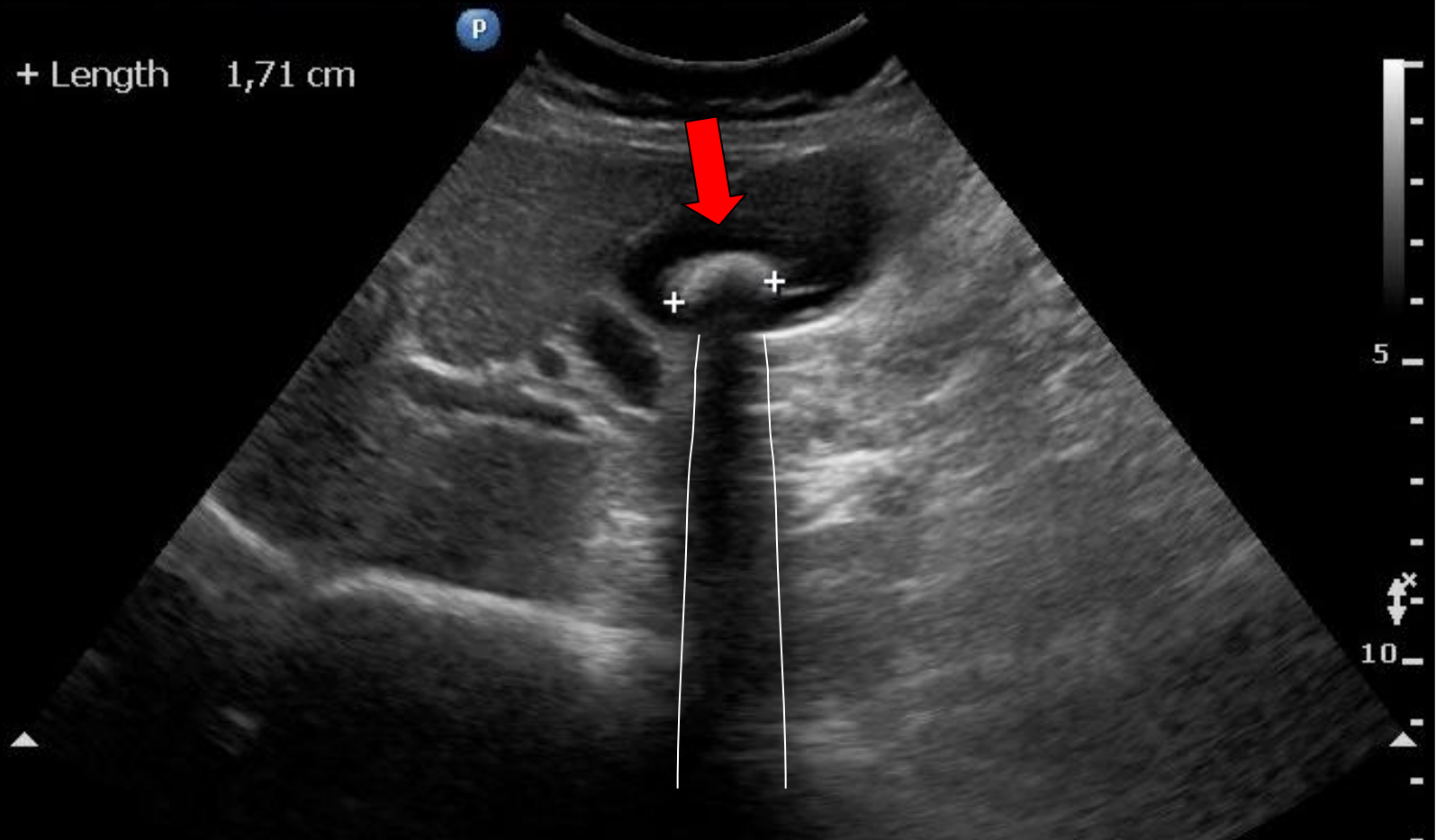
15,0cm

# 16.

Abd Gen  
C5-2  
31Hz  
15,0cm

+ Length 1,71 cm

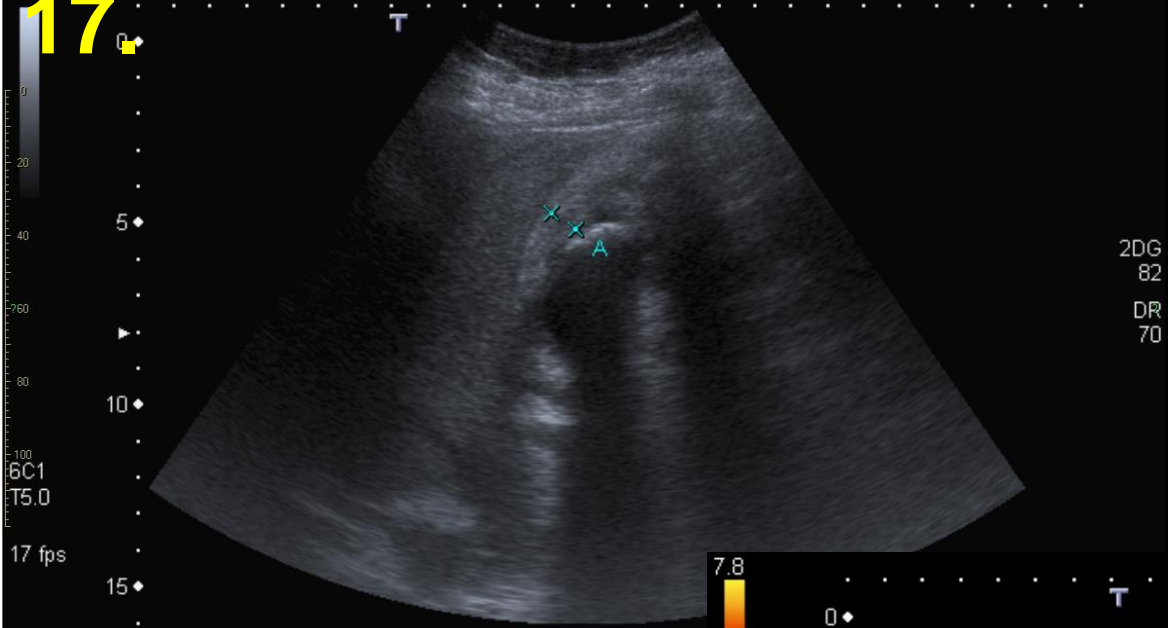
2D  
HGen  
Gn 60  
56  
3 / 3 / 3



- Epehólyag ultrahangképe konvex fejjel (3,5–5 MHz) / Ultrasound of gallbladder with convex probe (3.5–5 MHz)
- Echodens (hangárnyékot adó) képlet a lumenben / Hyperdens structure in the lumen of the gallbladder with acoustic shadowing
- **Dg.: Cholecystolithiasis / Diagnosis: Gallstone disease**

15,0cm

17

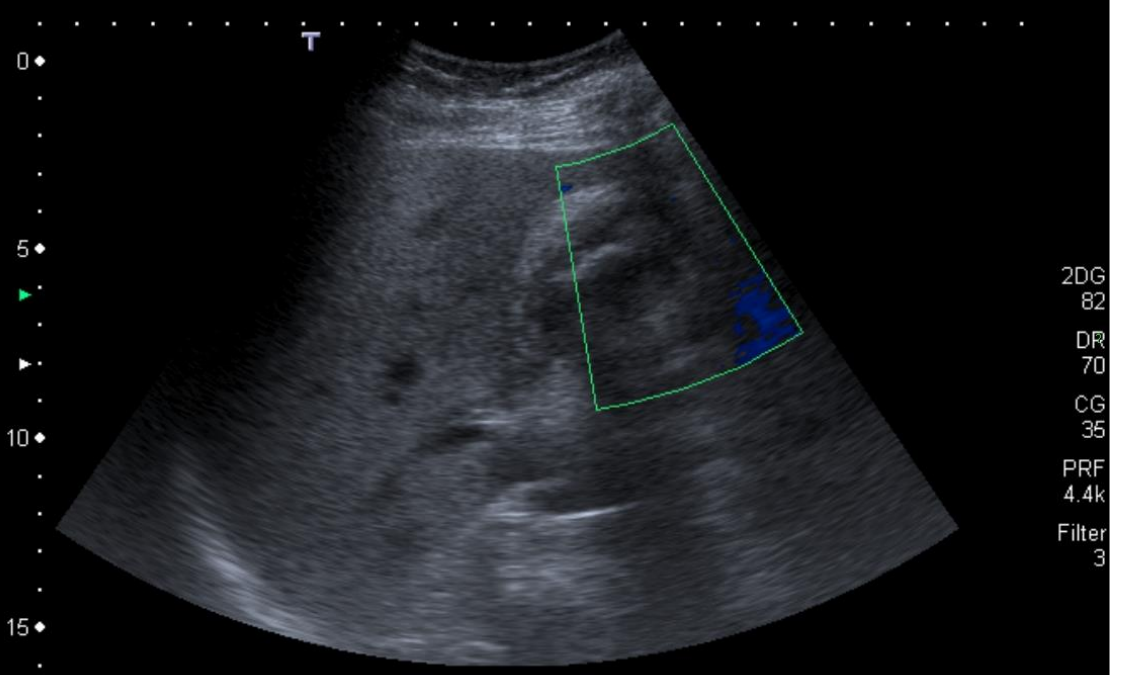


1.67 : 1  
wav 4.04 : 1  
100% Dist A 8.1 mm



7.8  
cm/s  
260  
80  
100  
6C1  
T5.0  
CF 2.5  
9 fps

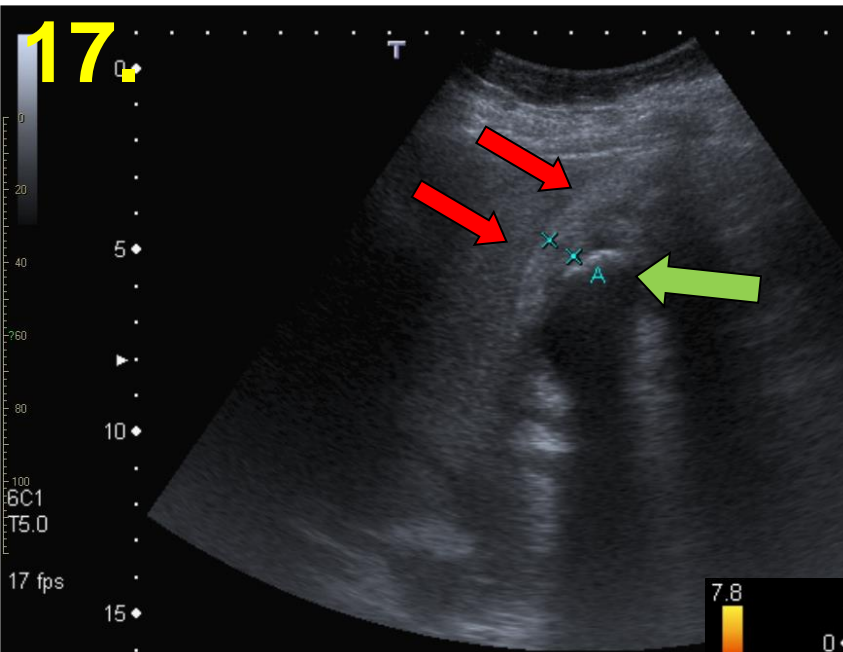
1.67 : 1  
wav 3.86 : 1  
100%



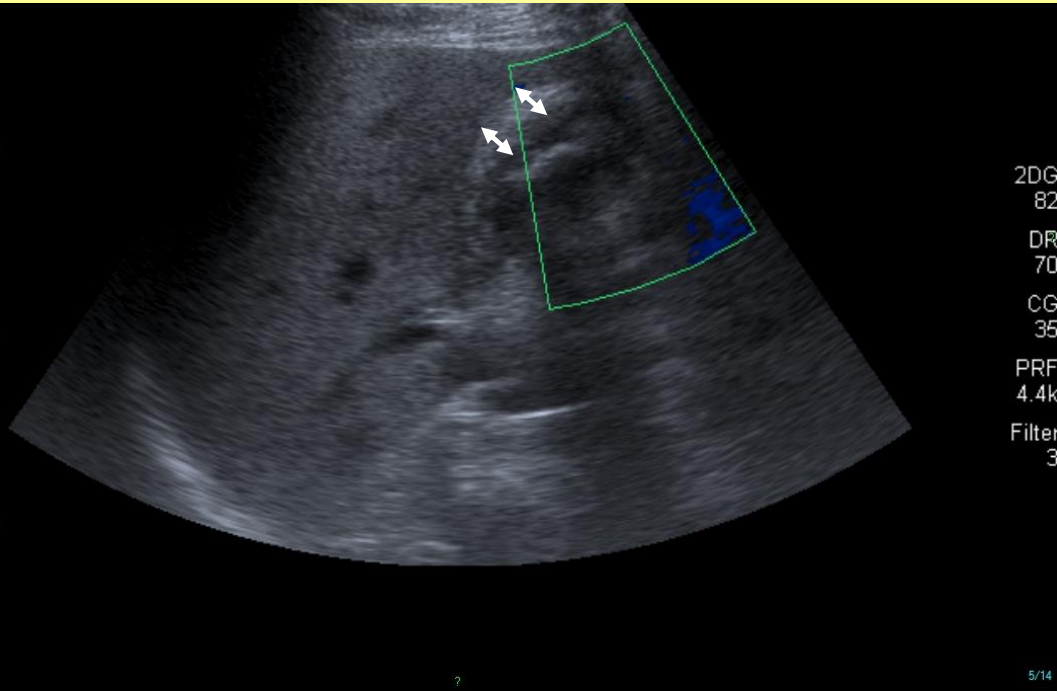
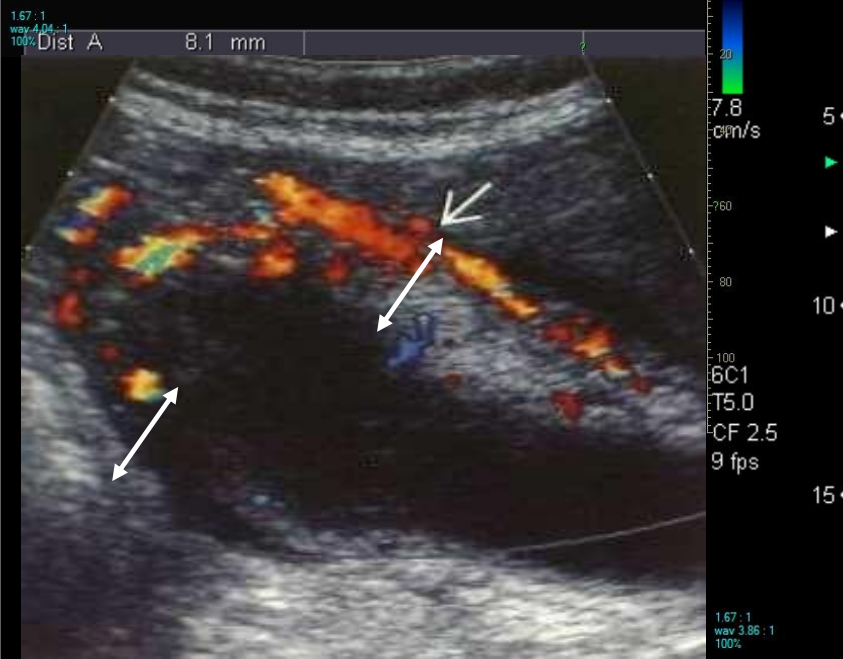
2DG  
82  
DR  
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CG  
35  
PRF  
4.4k  
Filter  
3



17.



- Epehólyag ultrahangképe konvex fejjel (3,5–5 MHz), B-mód / Ultrasound of gallbladder with convex probe (3.5–5 MHz), B-mode
- Vastag, rétegzett fal, ödéma (*piros nyíl*) / Thick, stratified wall, oedematous (*red arrow*)
- Echodens kő a lumenben (*zöld nyíl*) / Hyperdens stone in the lumen (*green arrow*)
- Epehólyag, color doppler / Color Doppler of the Gallbladder
- Vastag, rétegzett fal, ödéma (*fehér nyíl*) / Thick, stratified wall, oedematous (*white arrow*)
- Fokozott vascularisatio a falban / Hypervascularisation in the wall
- **Dg.: Cholecystitis acuta calculosa / Diagnosis: Acute cholecystitis**



18.

Abd Gen  
C5-2  
40Hz  
11,0cm

2D  
HGen  
Gn 60  
56  
3/3/3

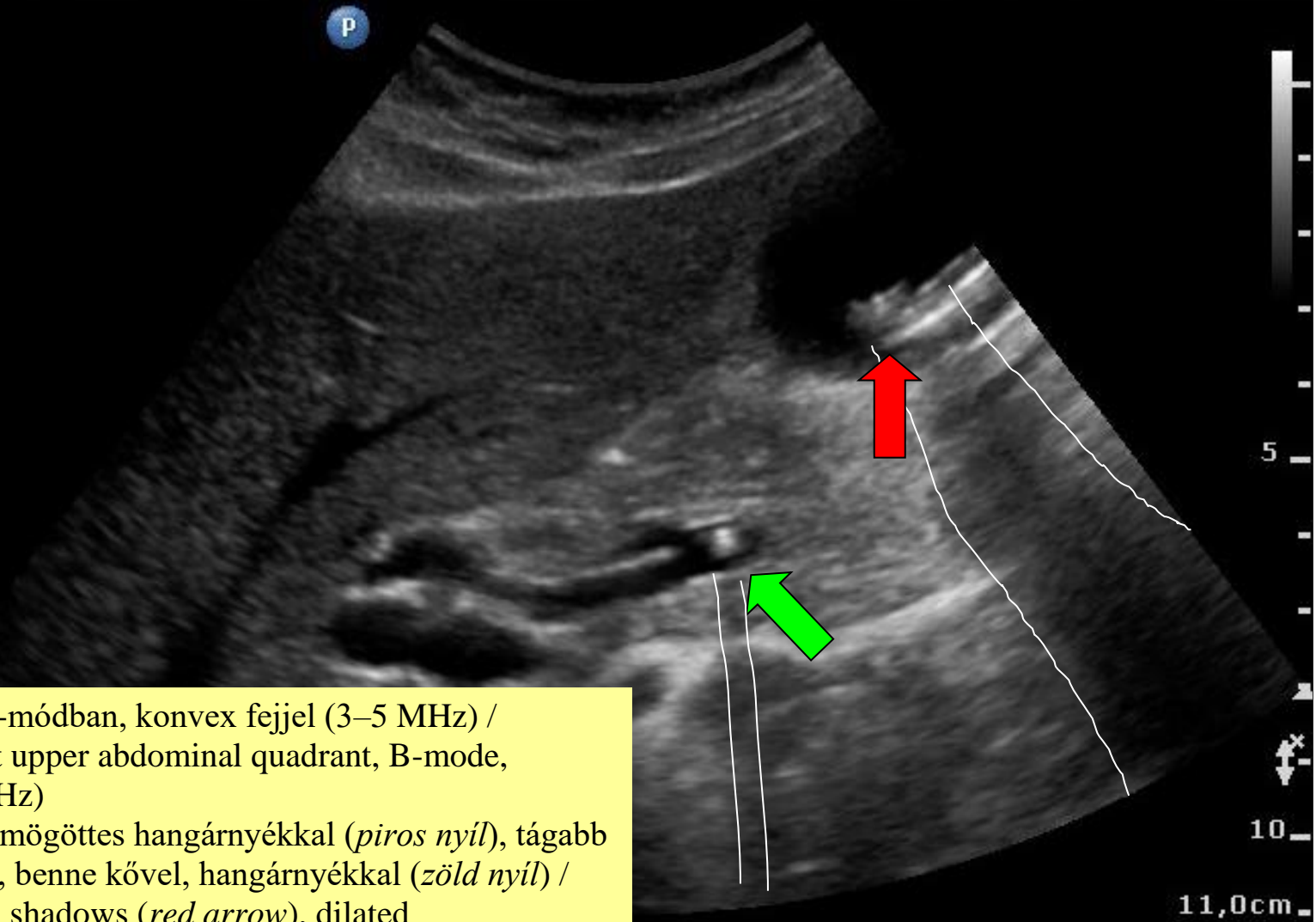


# 18.

Abd Gen  
C5-2  
40Hz  
11,0cm

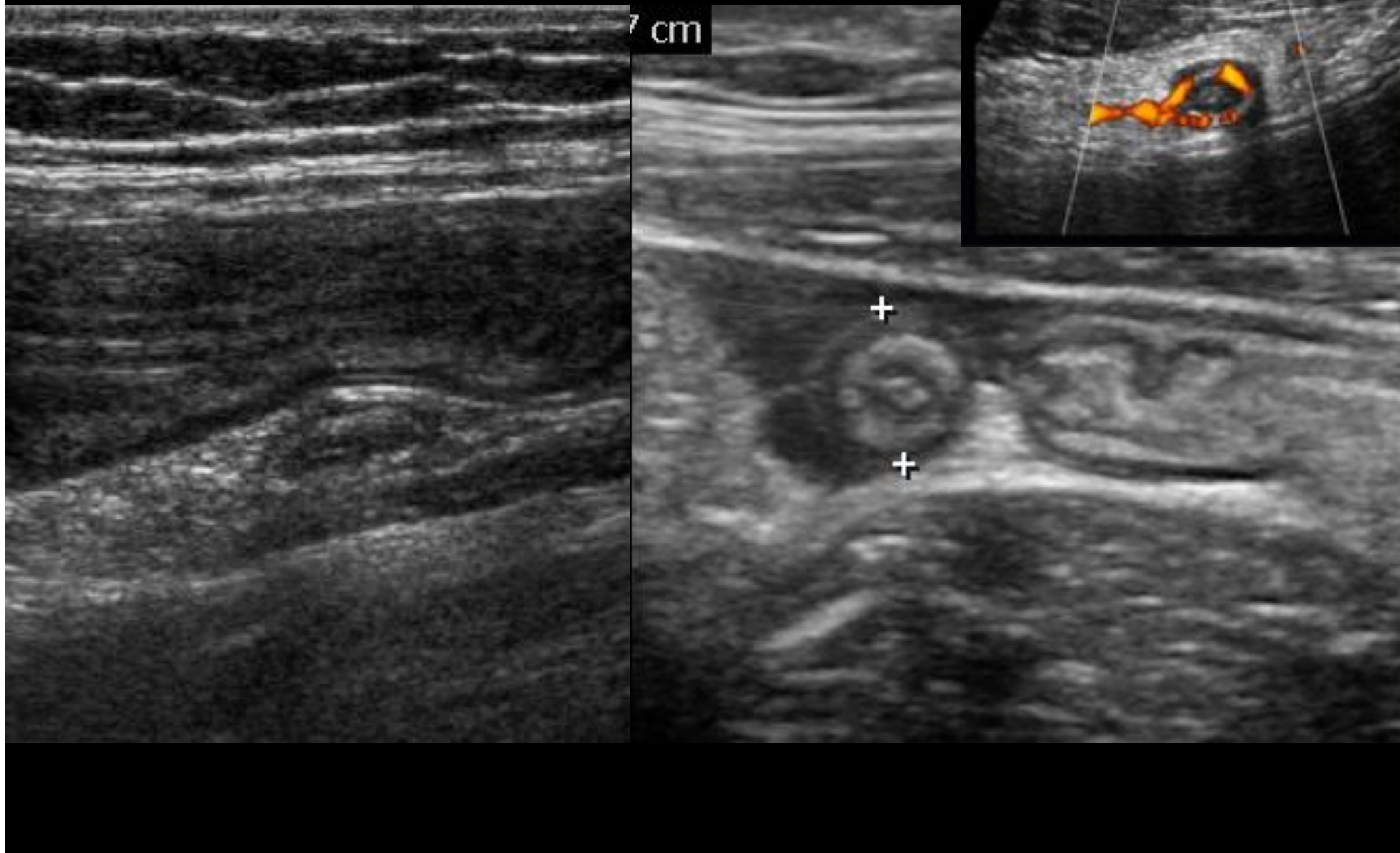
2D  
HGen  
Gn 60  
56  
3/3/3

- Jobb felhasi régió B-módban, konvex fejjel (3–5 MHz) /  
Sonogram of the right upper abdominal quadrant, B-mode,  
konvex probe (3-5 MHz)
- Cholecystolithiasis, mögöttes hangárnyékkal (*piros nyíl*), tágabb  
d. hepatocholedochus, benne kövel, hangárnyékkal (*zöld nyíl*) /  
Cholecystolith, dorsal shadows (*red arrow*), dilated  
hepatocholeduct, there is a stone in the duct with dorsal shadow  
(*green arrow*)
- **Dg.: Cholecystolithiasis és choledocholithiasis /**  
**Diagnosis: Cholecystolith and choledocholith**



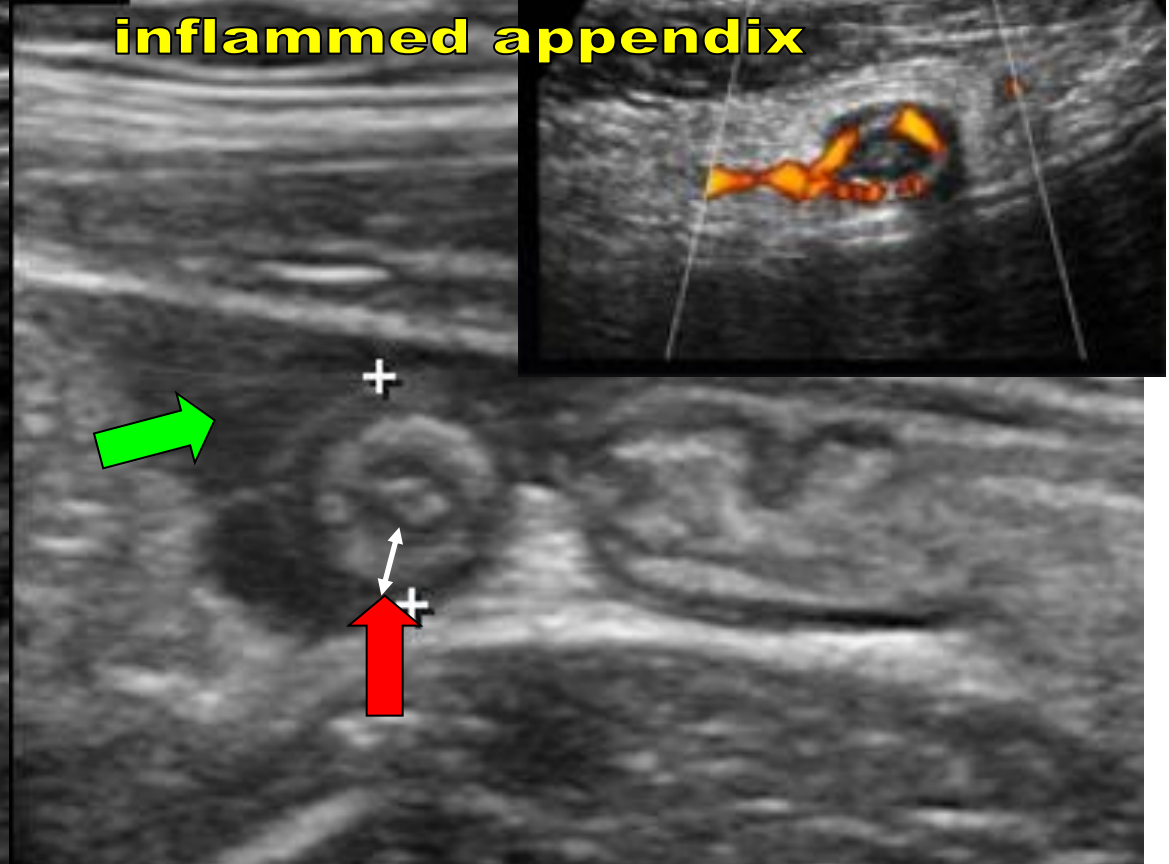
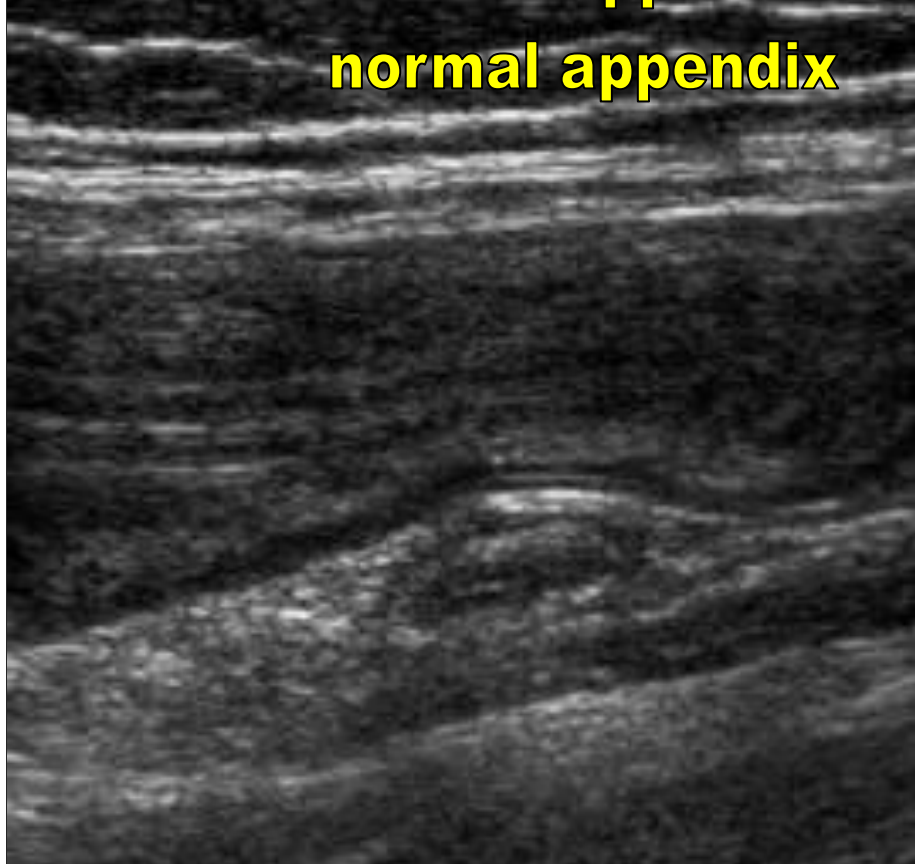


19.



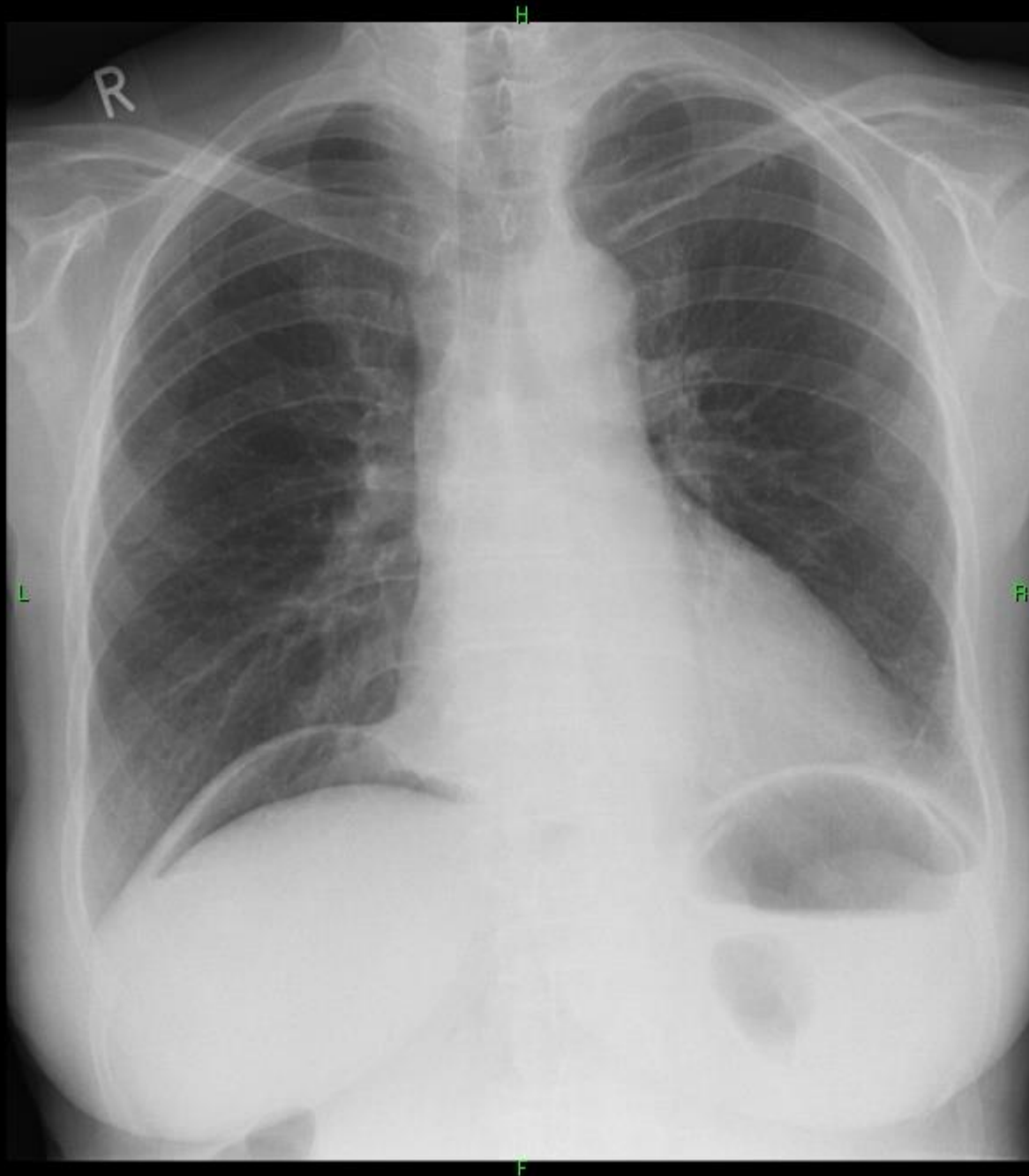
# 19. Normális appendix / normal appendix

# 7 cm Gyulladt appendix / inflammed appendix



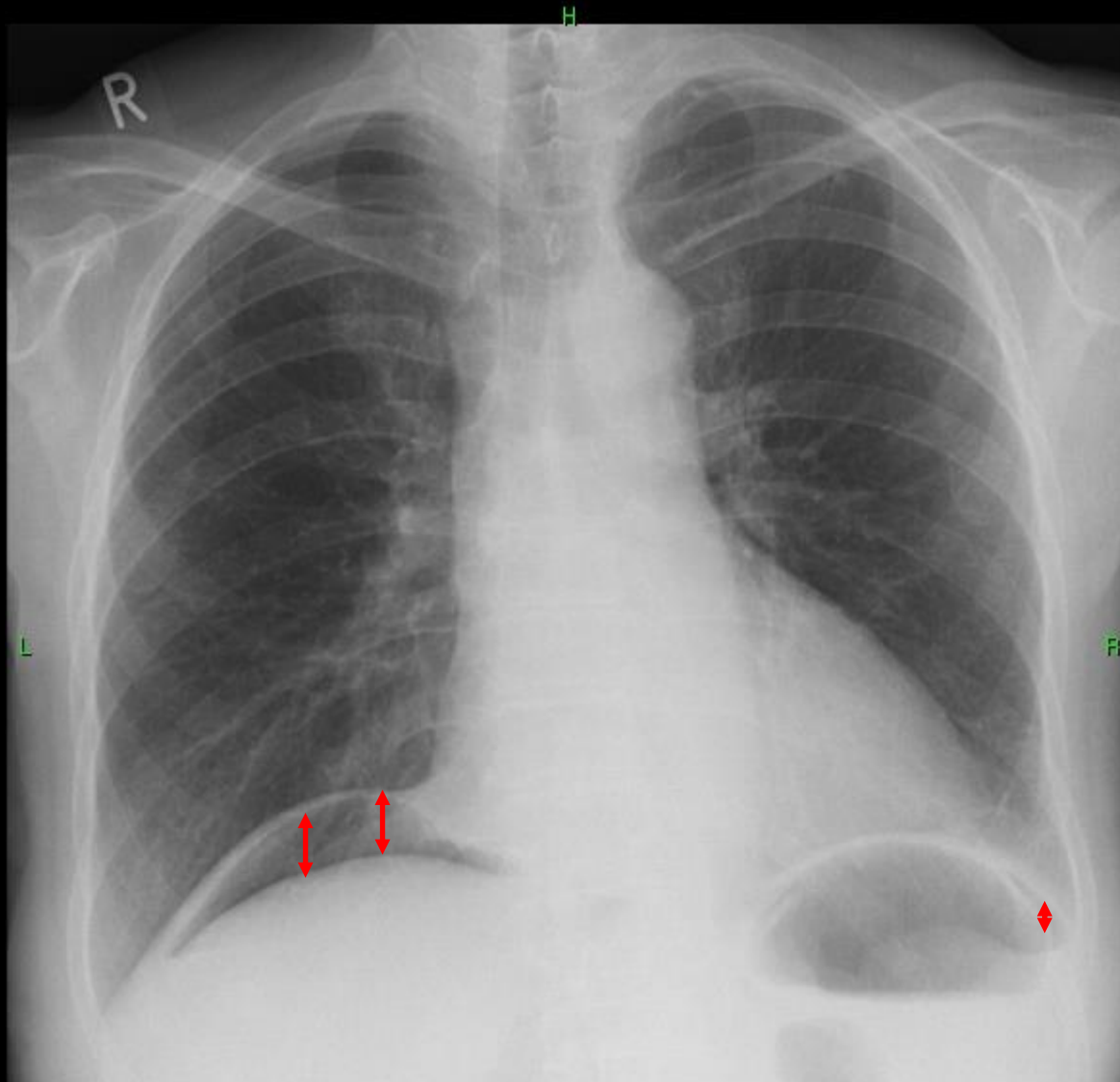
- Appendix ultrahangképe lineáris fejjel (7,5–10 MHz) / Sonogram of the appendix with linear probe (7.5–10 MHz)
- Bal o.: Komprimálható normális appendix. Jobb o.: Nem komprimálható tubuláris képlet, megvastagodott, ödémás fal (*piros nyíl*), kevés szabad hasi folyadék (*zöld nyíl*), hypervascularisált fal / Left image: Normal, compressible appendix. Right image: Tubular structure with thickened wall with oedema (*red arrow*), can not compressed, free abdominal effusion (*green arrow*), hypervascularised wall
- Dg.: Ép appendix és appendicitis acuta / **Diagnosis: normal appendix and acute appendicitis**

20.





20.

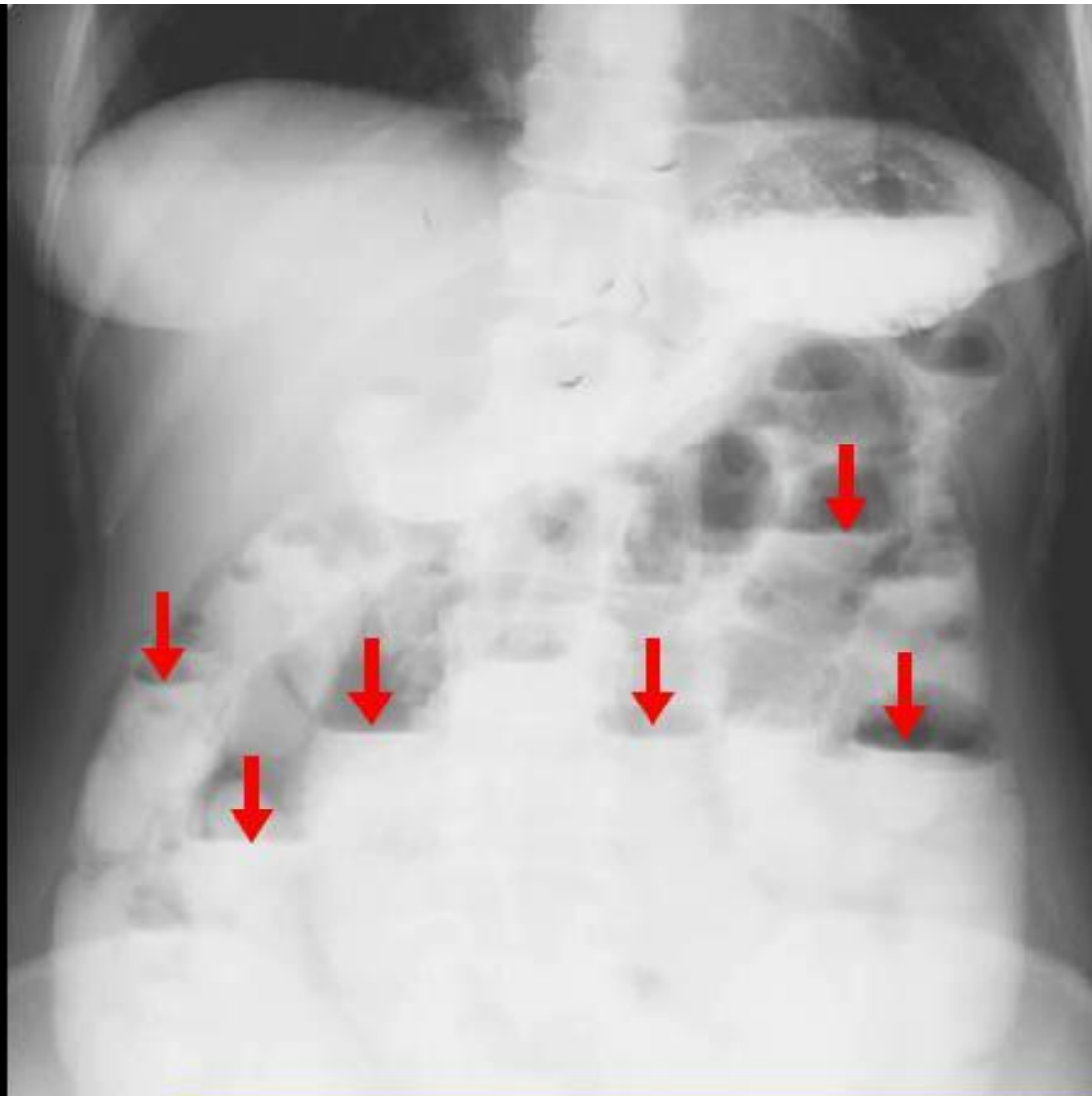


- Nyílrányú mellkasi röntgenfelvétel (PA, álló helyzetben) / Chest radiograph, frontal projection (in upright position)
- Transzparens sáv a rekeszkupolák alatt (*piros nyíl*) / Crescents of radiolucency under both hemidiaphragms (*red arrow*)
- **Dg.: Szabad hasi levegő (ok: üreges hasi szerv perforációja) / Diagnosis: Free abdominal air (due to perforation of luminal abdominal organ)**

21.



21.



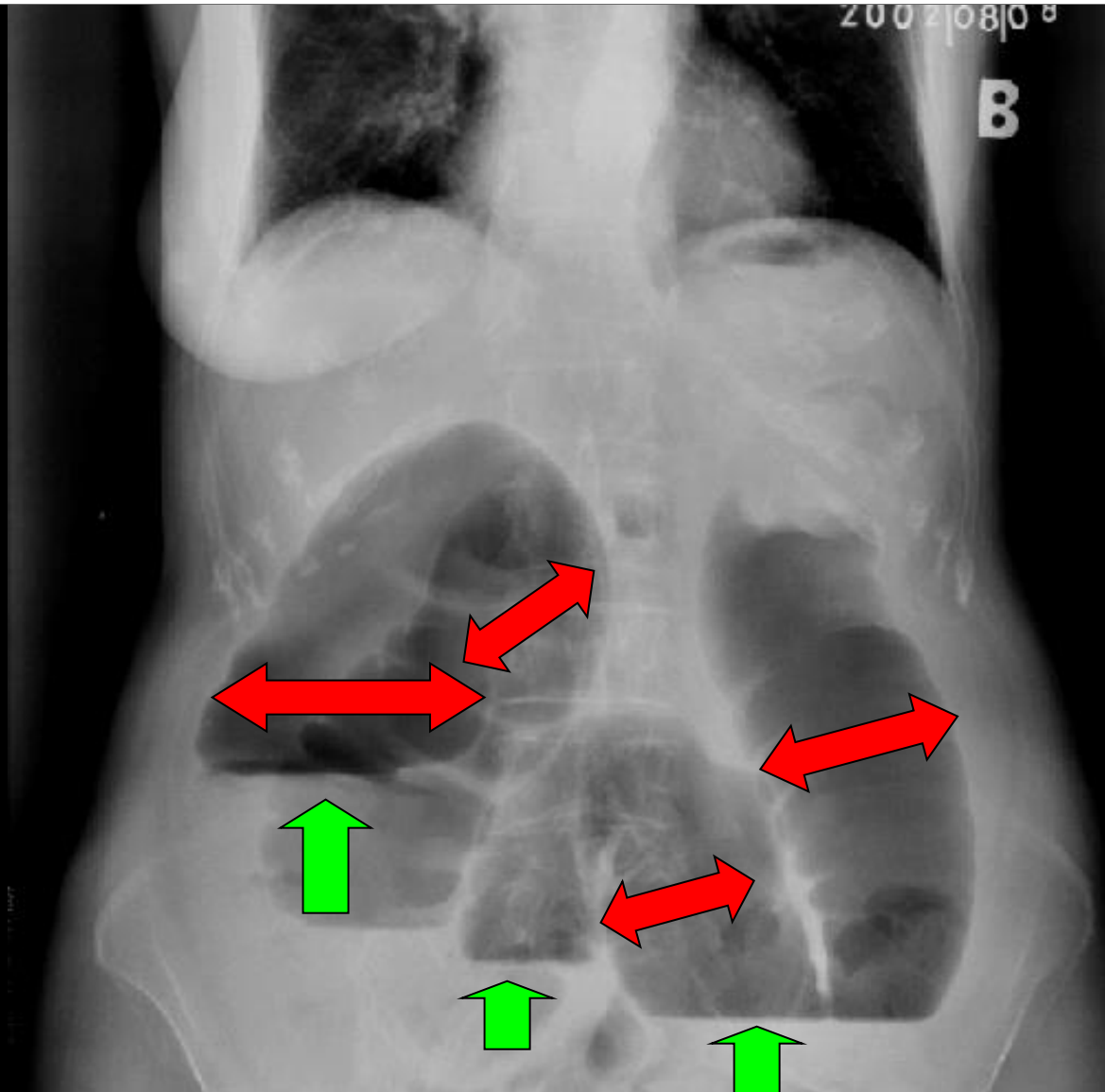
- Passzázskövetés – hasi röntgenfelvételek per os kontrasztanyagadás után / Follow-through examination (X-ray study with oral contrast agent)
- Kontrasztanyag a vékonybélkacsokban, nívók (*nyilak*) / Contrast agent in small-bowel loops with air–fluid levels (*arrows*)
- **Dg.: Vékonybélileus / Diagnosis: Small-bowel obstruction („small-bowel ileus”)**



22.

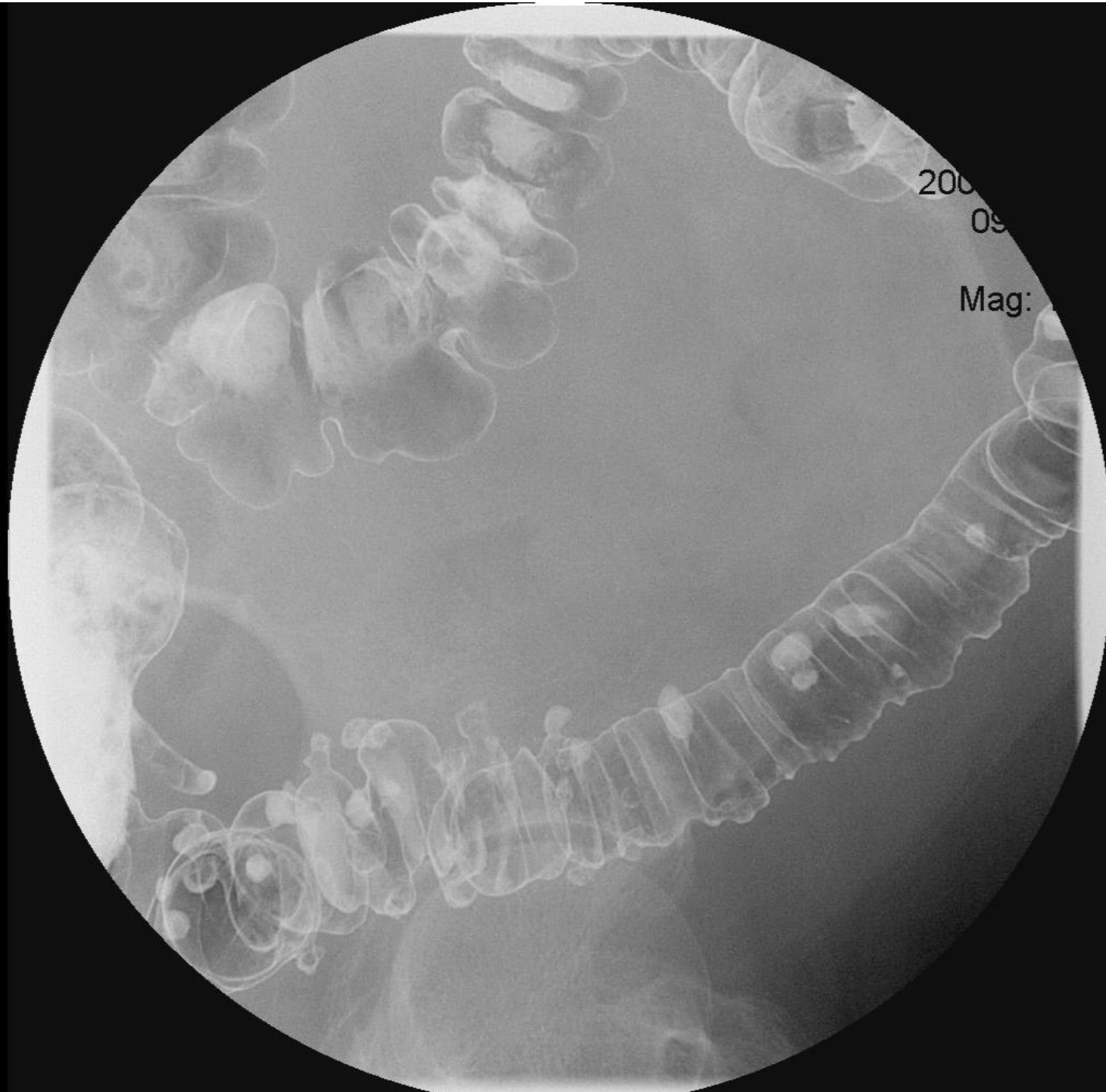


22.



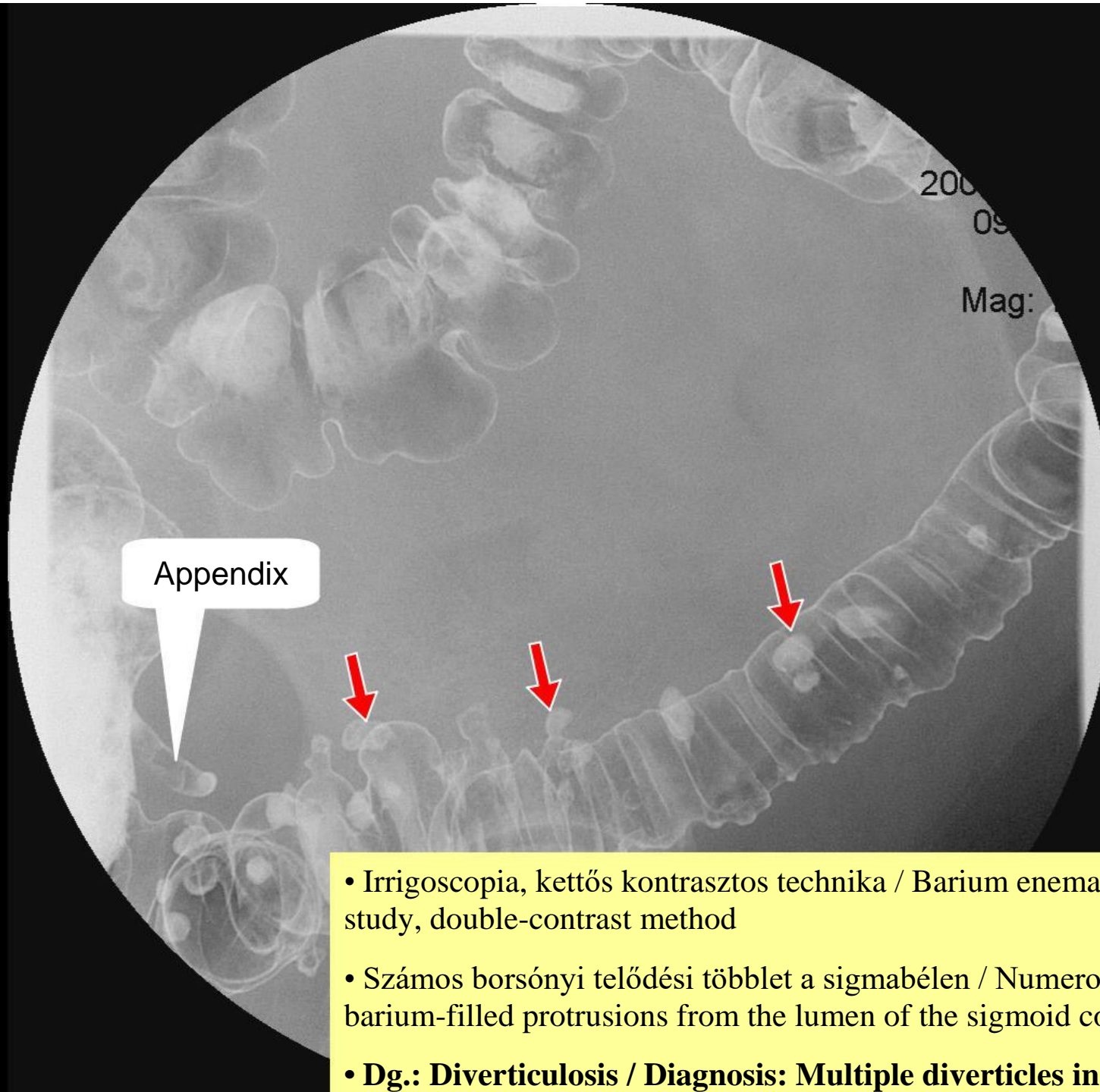
- Natív hasi röntgenfelvétel, álló helyzet / Abdominal plain radiograph, standing posture
- Disztendált colon (*piros nyíl*), széles nívók (*zöld nyíl*) / Distended colon (*red arrow*), air–fluid levels (*green arrow*)
- **Dg.: Vastagbélileus / Diagnosis: Large-bowel obstruction („large-bowel ileus”)**

23.



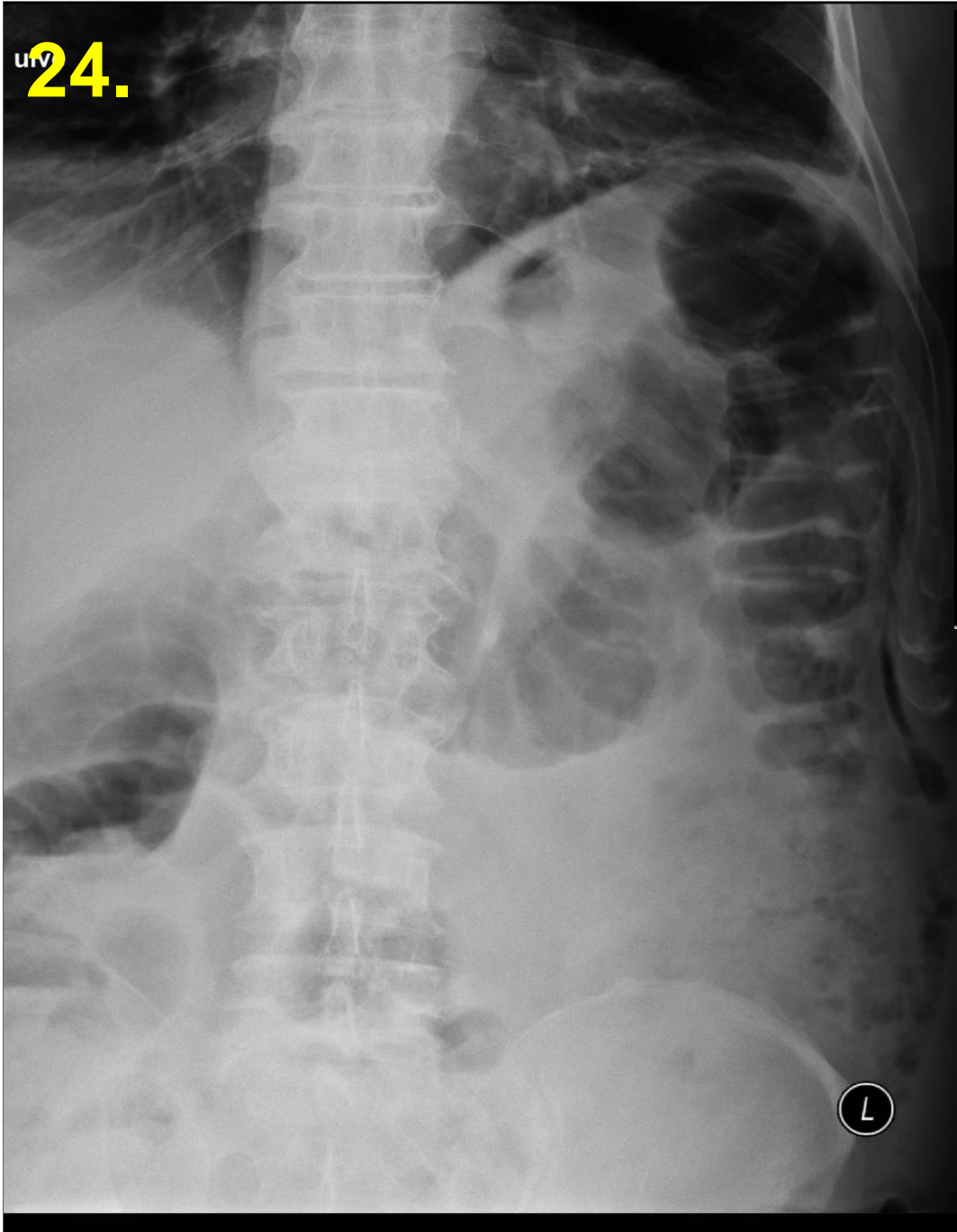


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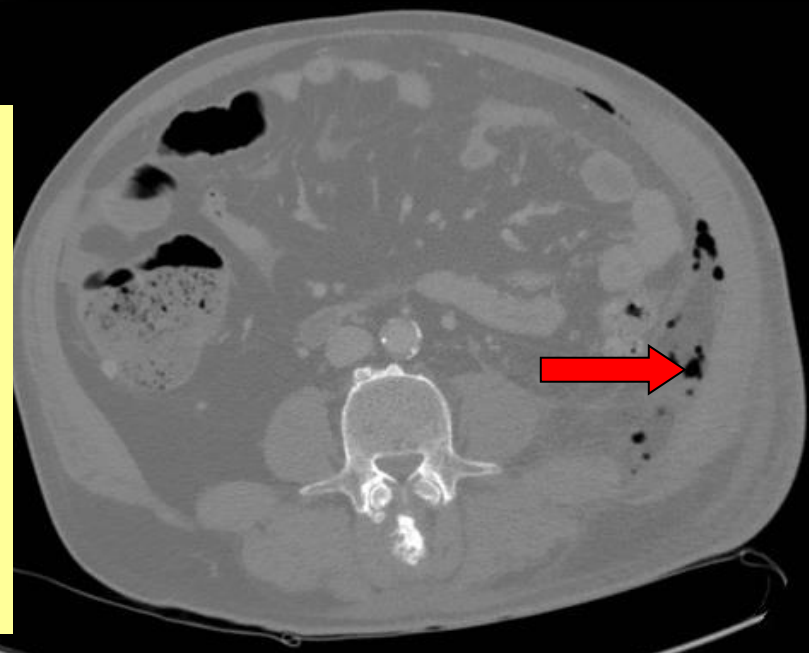
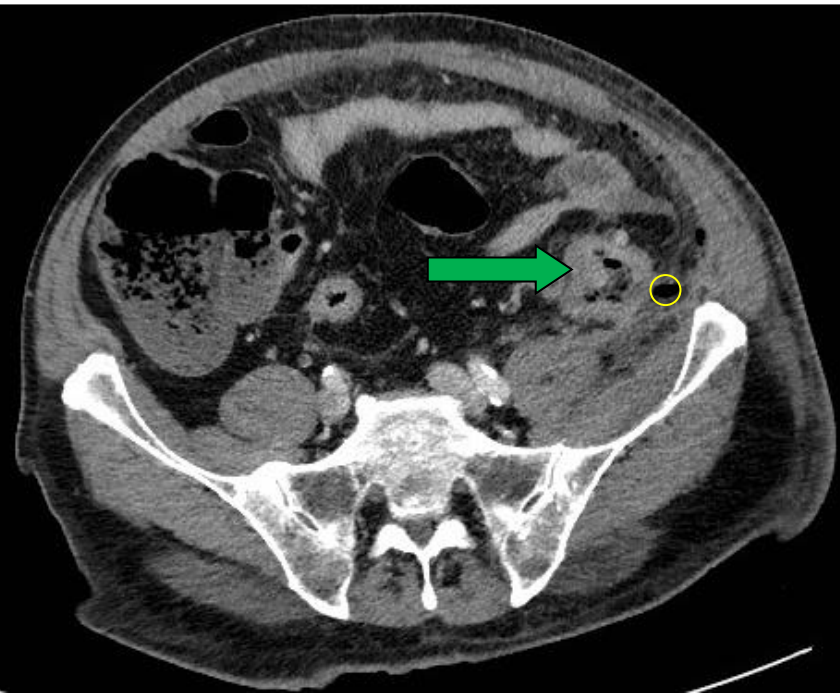
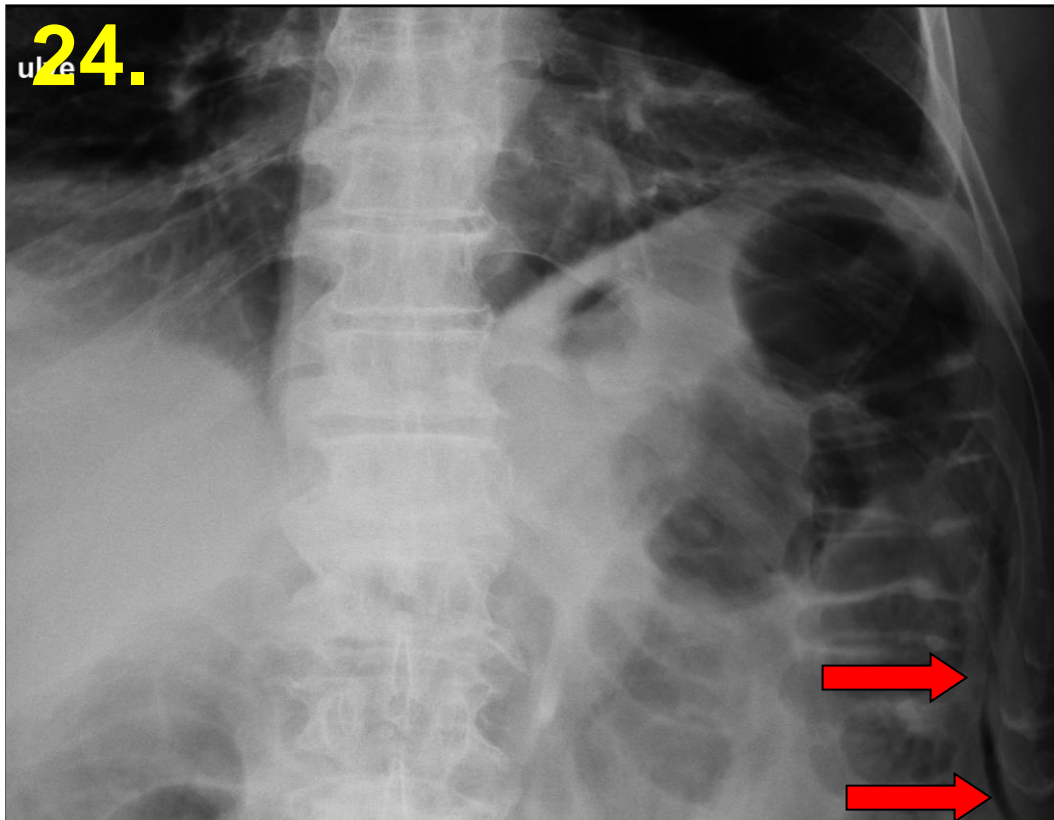
- Irrigoscopia, kettős kontrasztos technika / Barium enema study, double-contrast method
- Számos borsónyi telődési többlet a sigmabélen / Numerous small barium-filled protrusions from the lumen of the sigmoid colon
- **Dg.: Diverticulosis / Diagnosis: Multiple diverticles in sigma**

univ 24.



L

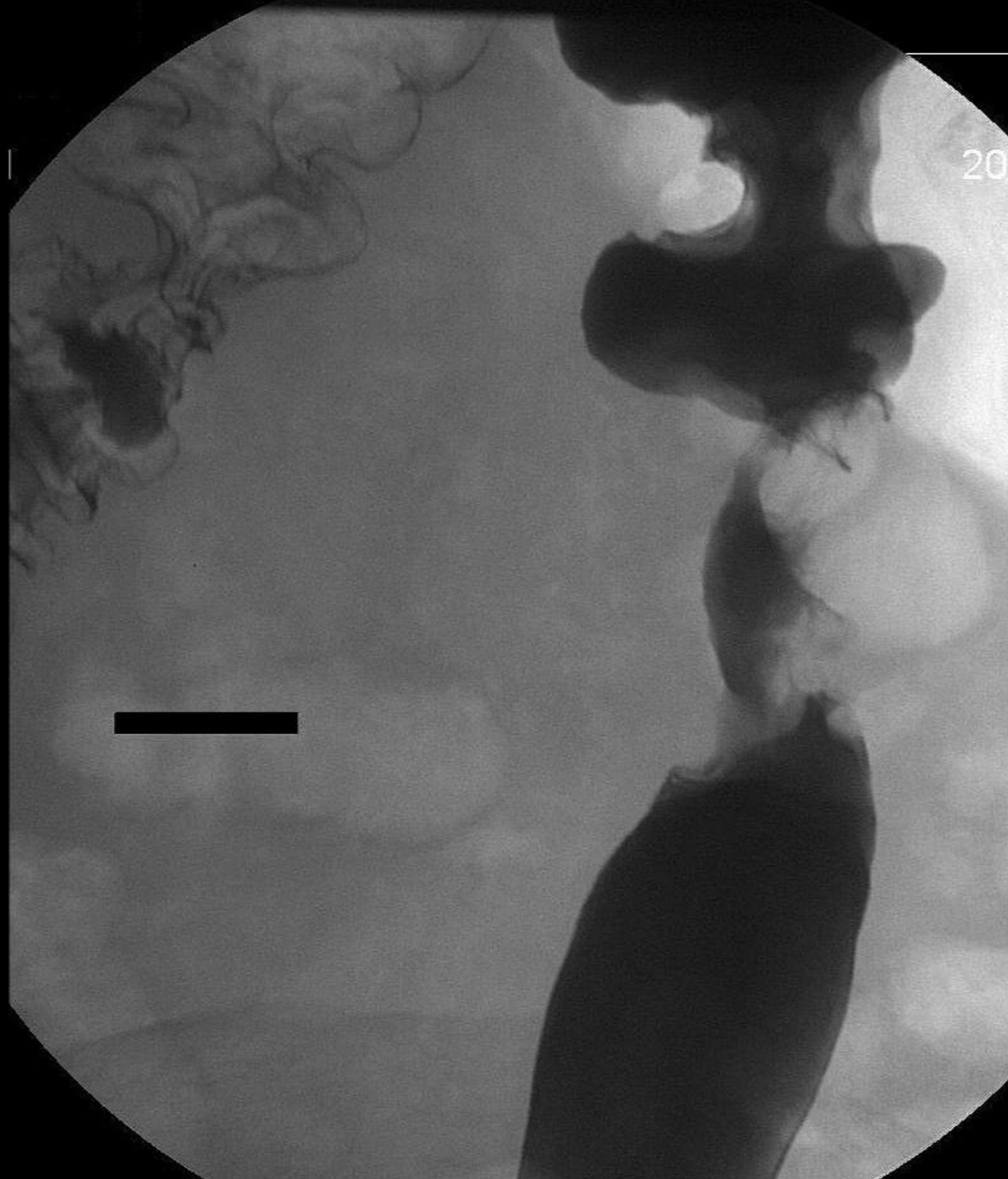
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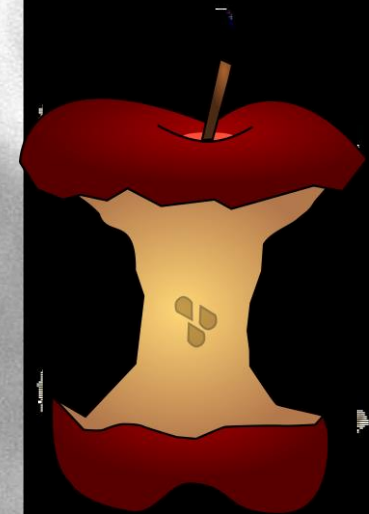
- Bal o.: Natív hasi röntgenfelvétel (ülve), szabad hasi levegővel (*piros nyíl*) / Left: Abdominal plain radiograph (seated posture), free abdominal air (*red arrows*)
- Jobb o.: Kontrasztanyagossal CT, perforált diverticulummal (sárga kör), sigma fal megvastagodásával (*zöld nyíl*), alsó képen tüdő ablak, szabad hasi levegővel (*piros nyíl*) / Right upper image: contrast enhanced CT, left sided diverticle (yellow circle) with perforation, wall thickening in the sigma (*green arrow*), Right lower image: lung window, free abdominal air (*red arrow*)
- **Dg.: Perforált diverticulitis / Diagnosis: Perforated diverticulitis**



25.



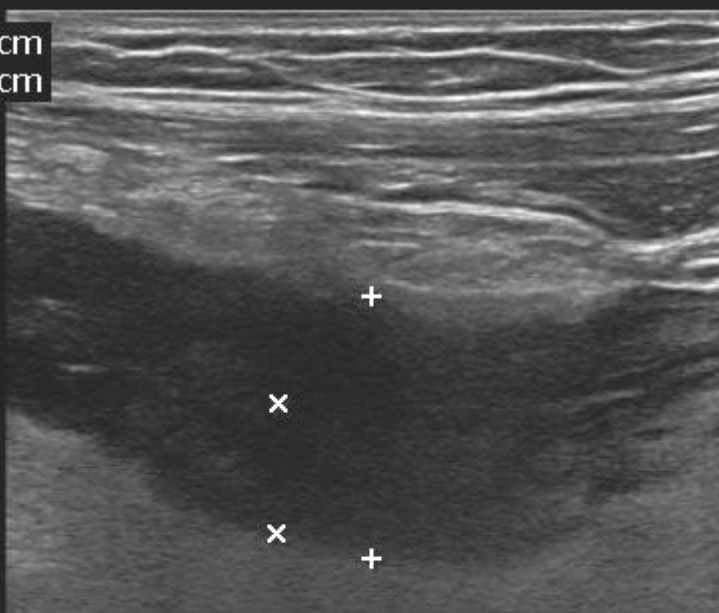
25.



- Irrigoscopia, kettős kontrasztos technika / Barium enema study, double-contrast method
- Átvilágítás / Fluoroscopy image
- Körkörös szabálytalan lúmenszűkület / Annular irregular stenosis (apple-core sign)
- **Dg.: Carcinoma coli / Dg.: Colon cancer**

26.  
+ Length  
x Length

1,84 cm  
0,914 cm



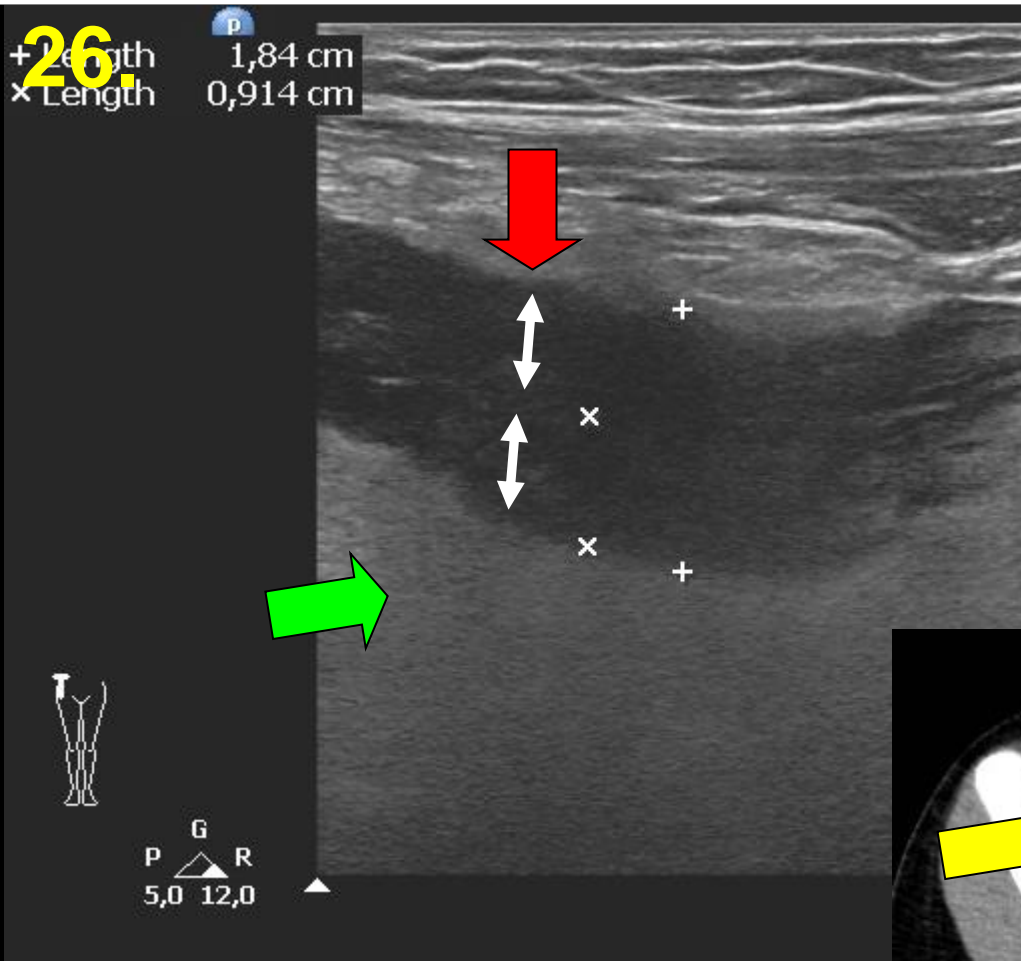
G  
P R  
5,0 12,0



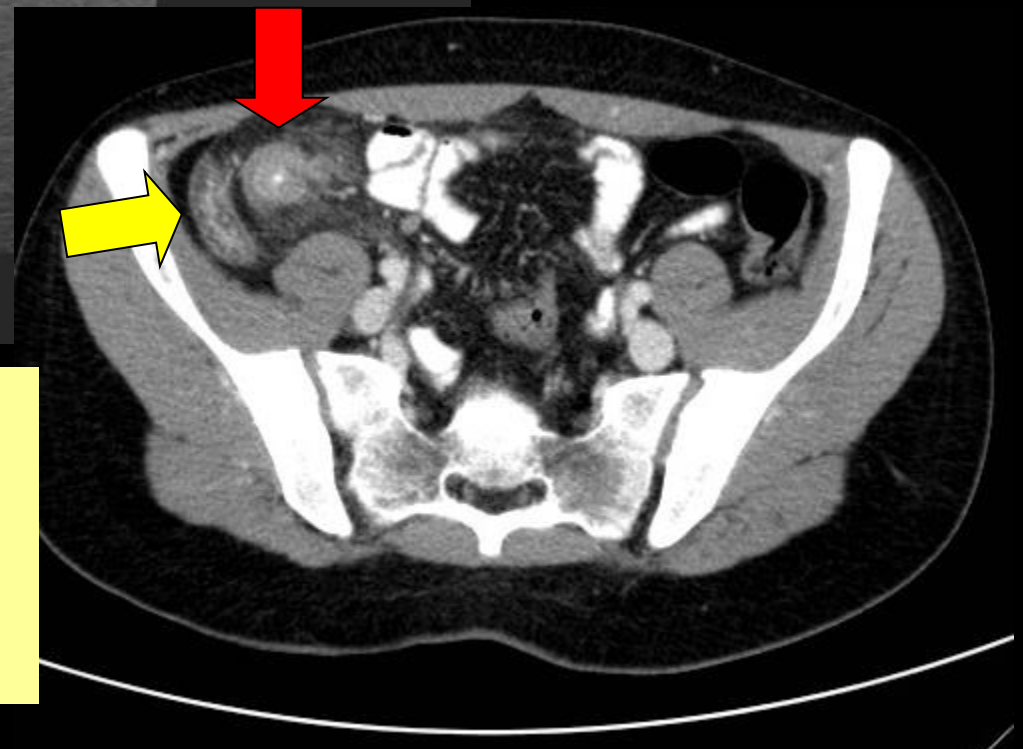


26.

+ Length 1,84 cm  
x Length 0,914 cm



- Ultrahang, B-mód, lineáris fej: terminalis ileum fala echoszegényen megvastagodott (*piros nyíl*), környező zsírszövet reflektivitása fokozott (*zöld nyíl*) / US, B-mode, linear US probe: wall of the terminal ileum thickened (*red arrow*), hypoechoid, surrounding fat tissue is hyperechogenic (*green arrow*)



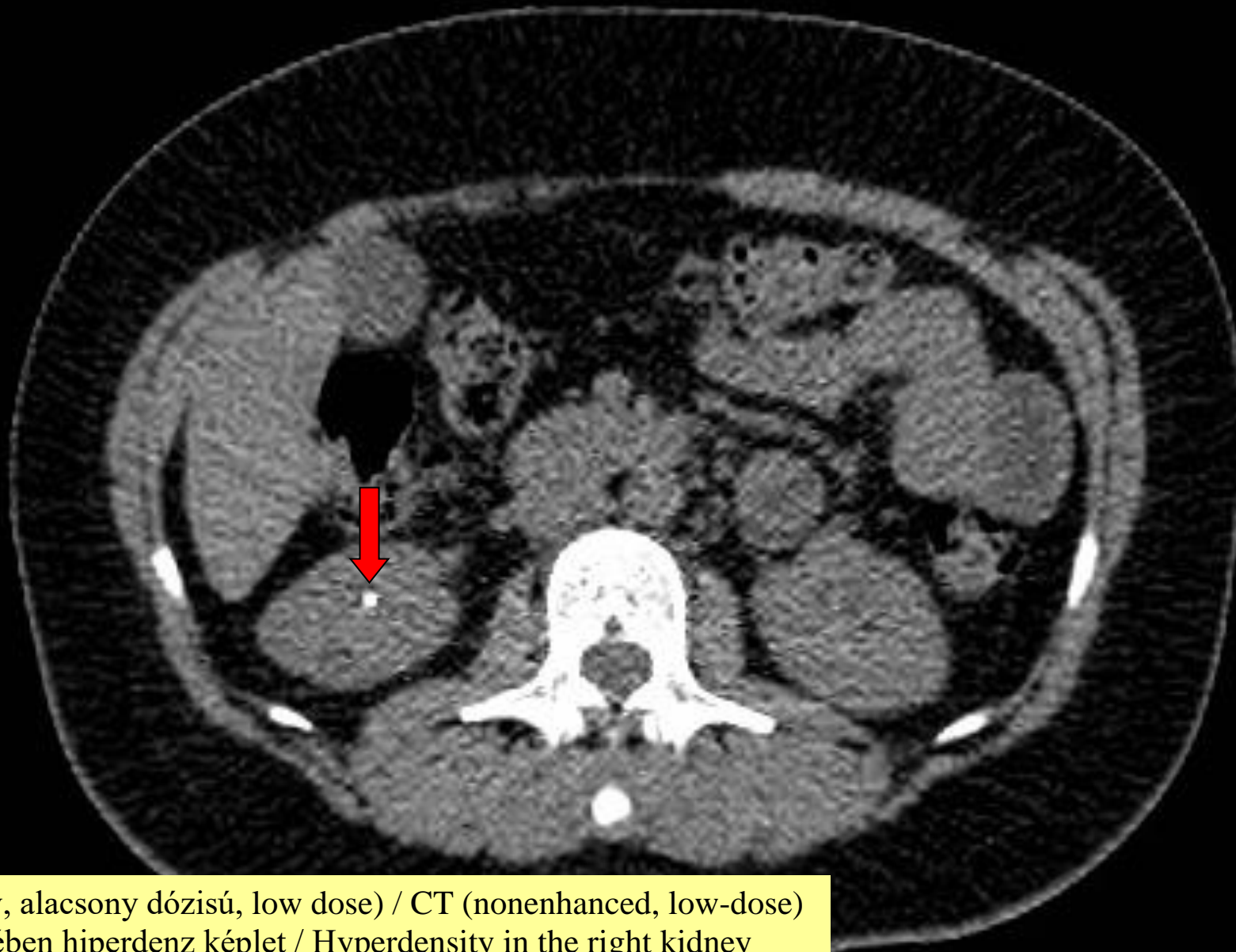
- Kontrasztanyagossal, vénás fázisú CT, terminalis ileum fala megvastagodott (*piros vonal*), coecum ép (*sárga nyíl*) / Contrast enhanced CT, venous phase, wall of terminal ileum thickened (*red arrow*), coecum is normal (*yellow arrow*)
- **Dg.: M. Crohn / Diagnosis: Crohn's disease**



27.

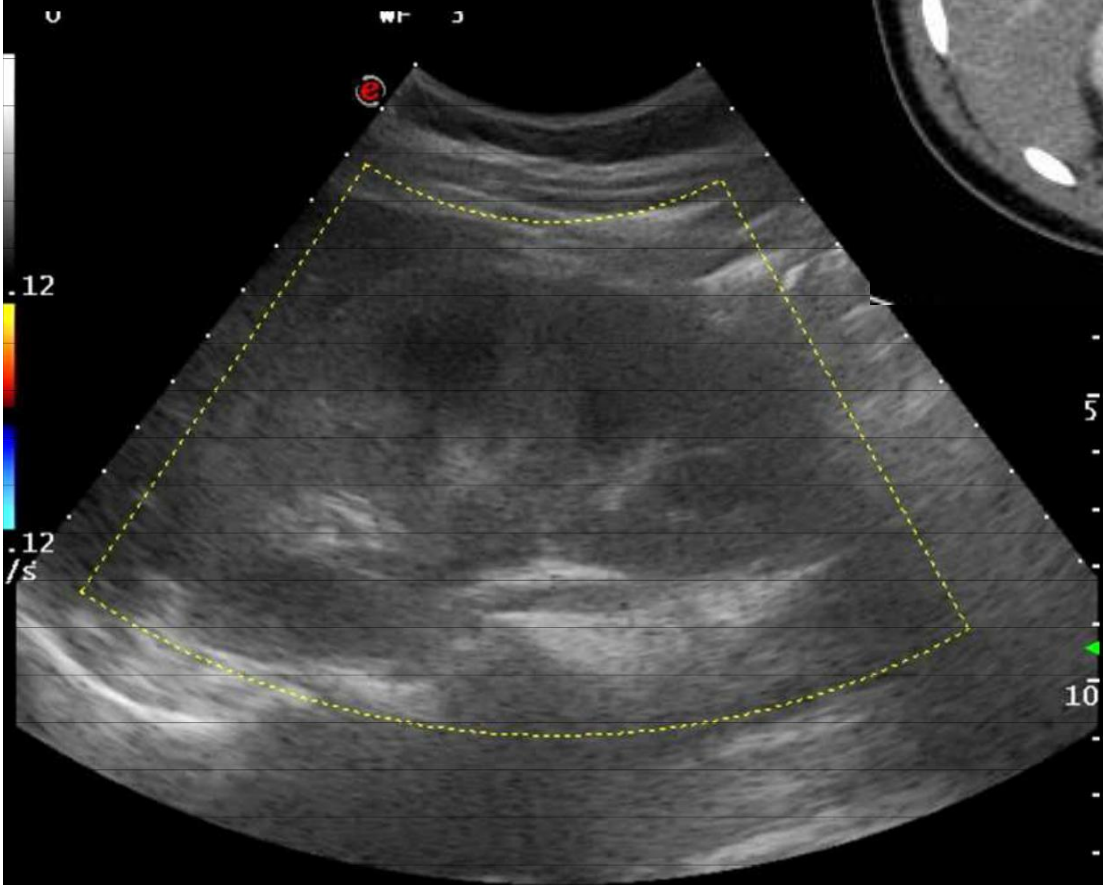


27.



- CT (natív, alacsony dóziséjú, low dose) / CT (nonenhanced, low-dose)
- Jobb vesében hiperdenz képlet / Hyperdensity in the right kidney
- **Dg.: Nephrolithiasis l.d. / Diagnosis: Stone in the right kidney**

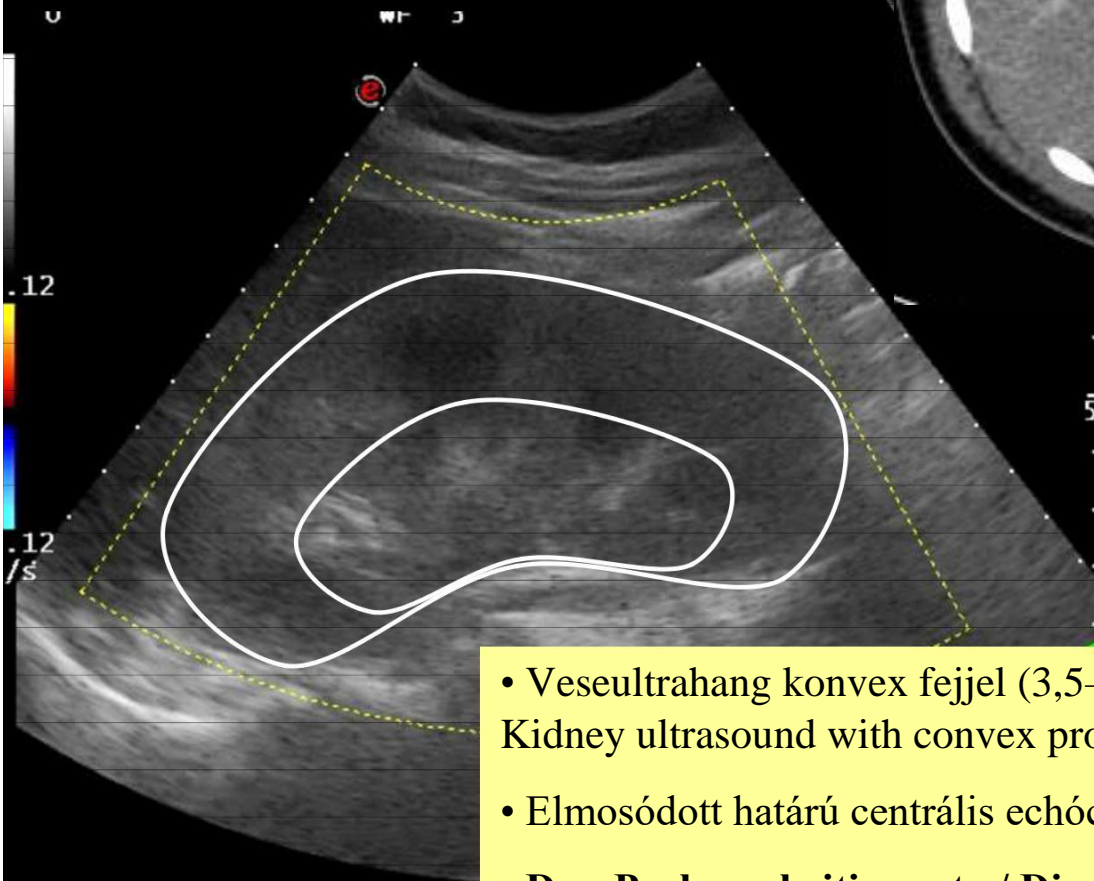
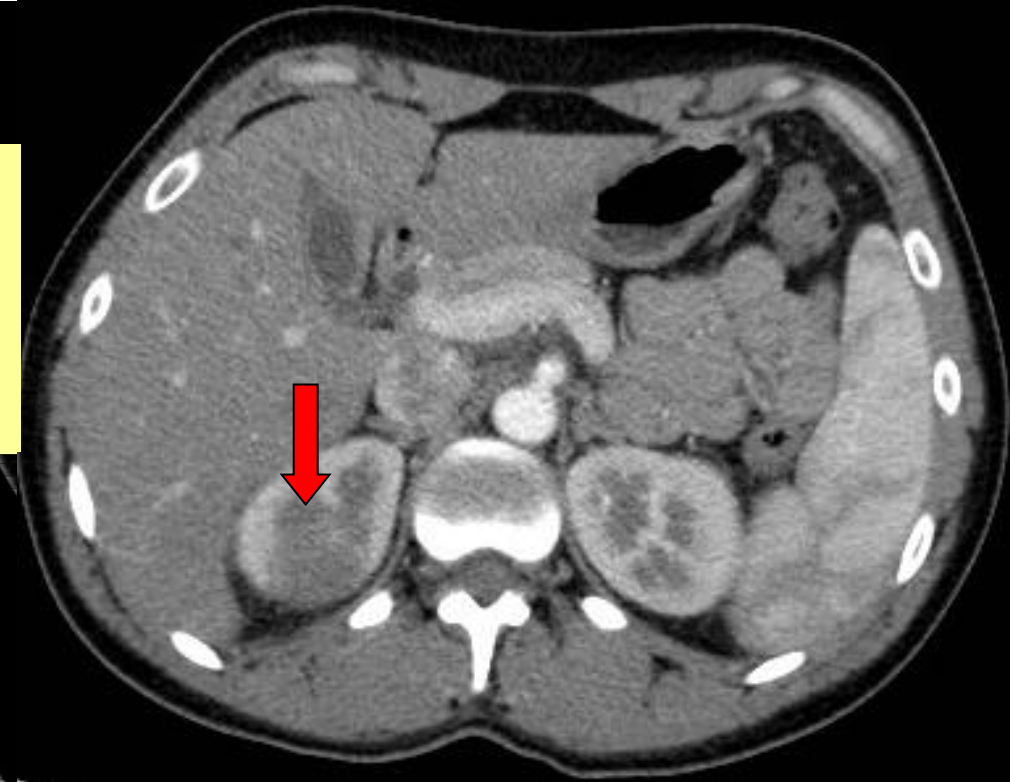
28.





# 28.

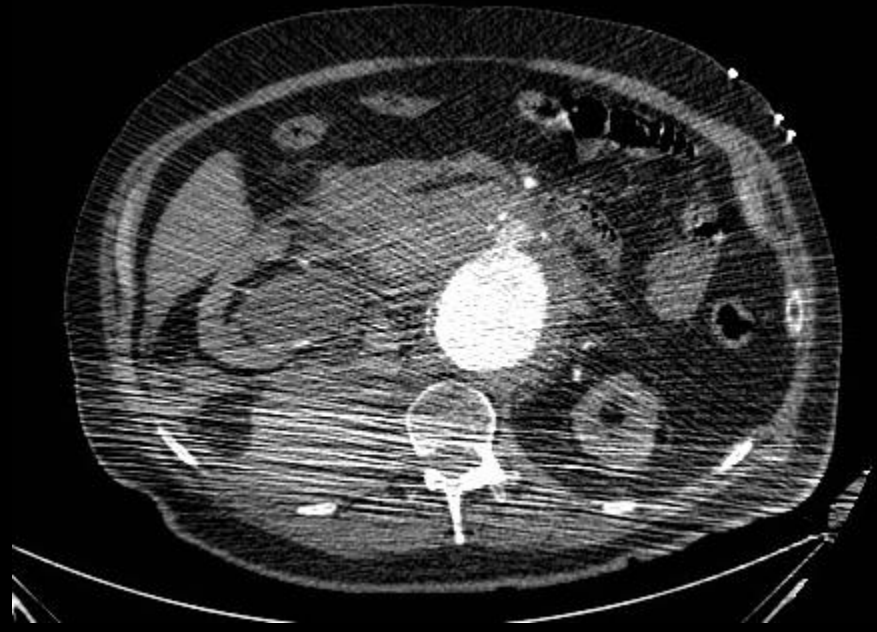
- CT (posztkontrasztos) / CT (contrast-enhanced)
- Jobb vese nagyobb, szabálytalan szerkezet / Enlarged right kidney with irregular structure



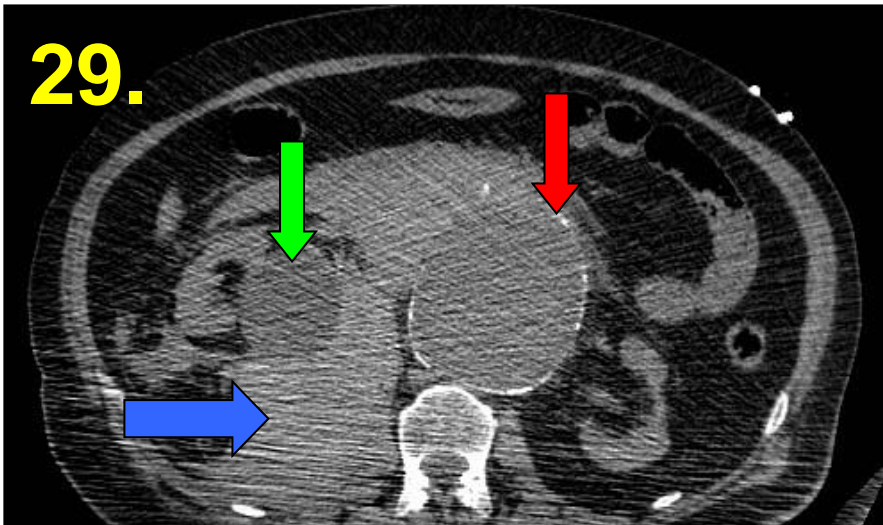
- Veseultrahang konvex fejjel (3,5–5 MHz), B-mód & színes Doppler / Kidney ultrasound with convex probe (3.5–5 MHz), B mode & color Doppler
- Elmosódott határú centrális echócsoport / Ill-margined central echo group
- **Dg.: Pyelonephritis acuta / Diagnosis: acute pyelonephritis**



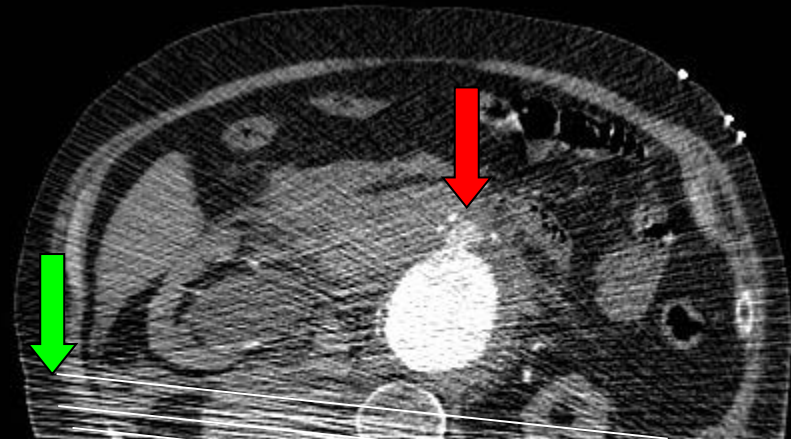
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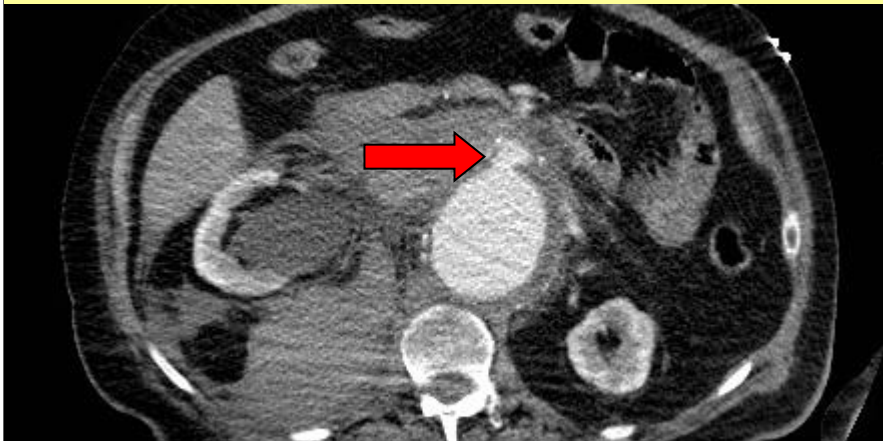
29.



- CT (natív) / CT (unenhanced)
- Aorta aneurysma (*piros nyíl*), retroperitonealis folyadékkal (*kék nyíl*), jobb vesecysta (*zöld nyíl*) / Aortic aneurysm (*red arrow*), retroperitoneal fluid collection (*blue arrow*), right kidney cyst (*green arrow*)



- CTA (axialis) / CTA (axial)
- Artefaktumok (vs. beteg karjától) (*zöld nyíl*) / Artefacts (due to the arms of the patient) (*green arrow*)
- Aorta aneurysma, kilépés *piros nyíllal* jelölve / Aortic aneurysm leakage (*red arrow*)



- CTA (axialis) / CTA (axial)
- Aorta aneurysma, kilépés *piros nyíllal* jelölve / Aortic aneurysm leakage (*red arrow*)



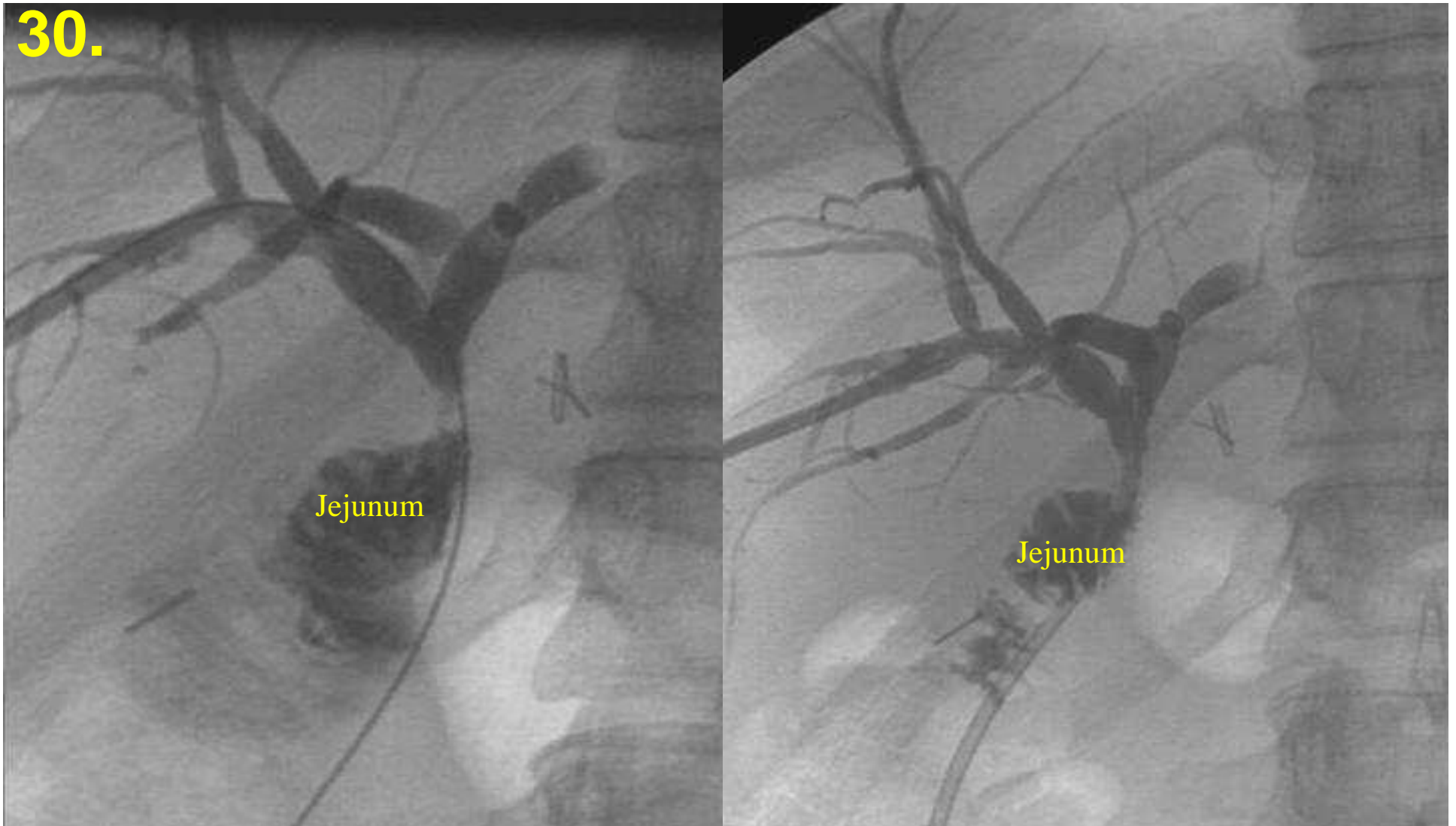
- CT (késői fázis) / CT (late phase)
- **Dg.: Aorta aneurysma ruptura, a hyperdens vér megjelenik a retroperitoneumban / Diagnosis: Aortic aneurysm rupture, hyperdens fluid collection (bleeding) in the retroperitoneum (red arrow)**



30.



30.



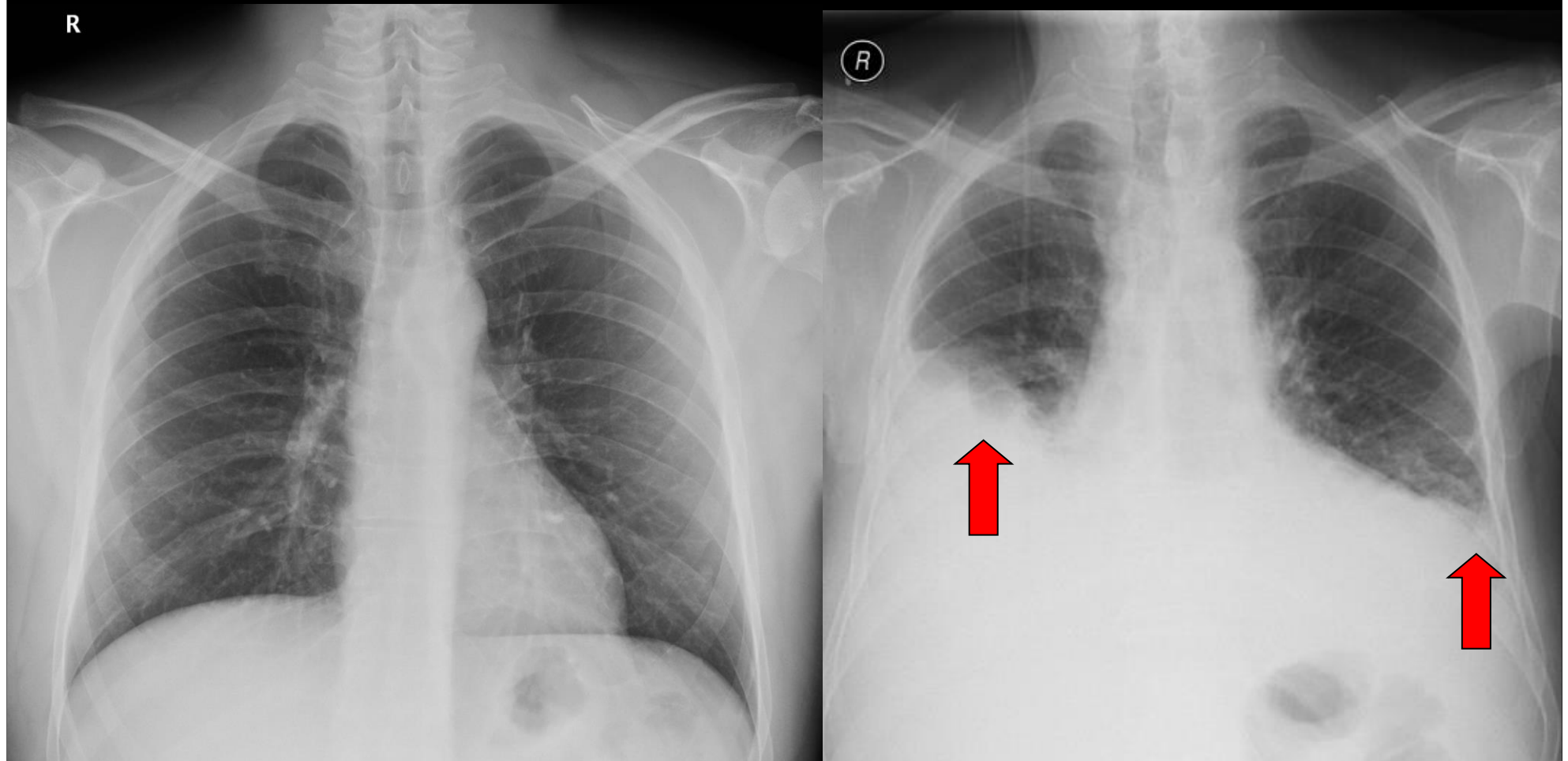
- Fluoroszkópiás célzott felvételek / Fluoroscopy spotfilms
- Vezetődrót az epeutakban és a jejunumban (st. post hepaticojejunostomiam) / Guide wire in bile ducts and jejunum (previous hepaticojejunostomy)
- **Perkután transzhepatikus drenázs (PTD) / Percutaneous transhepatic drainage (PTD)**



31.

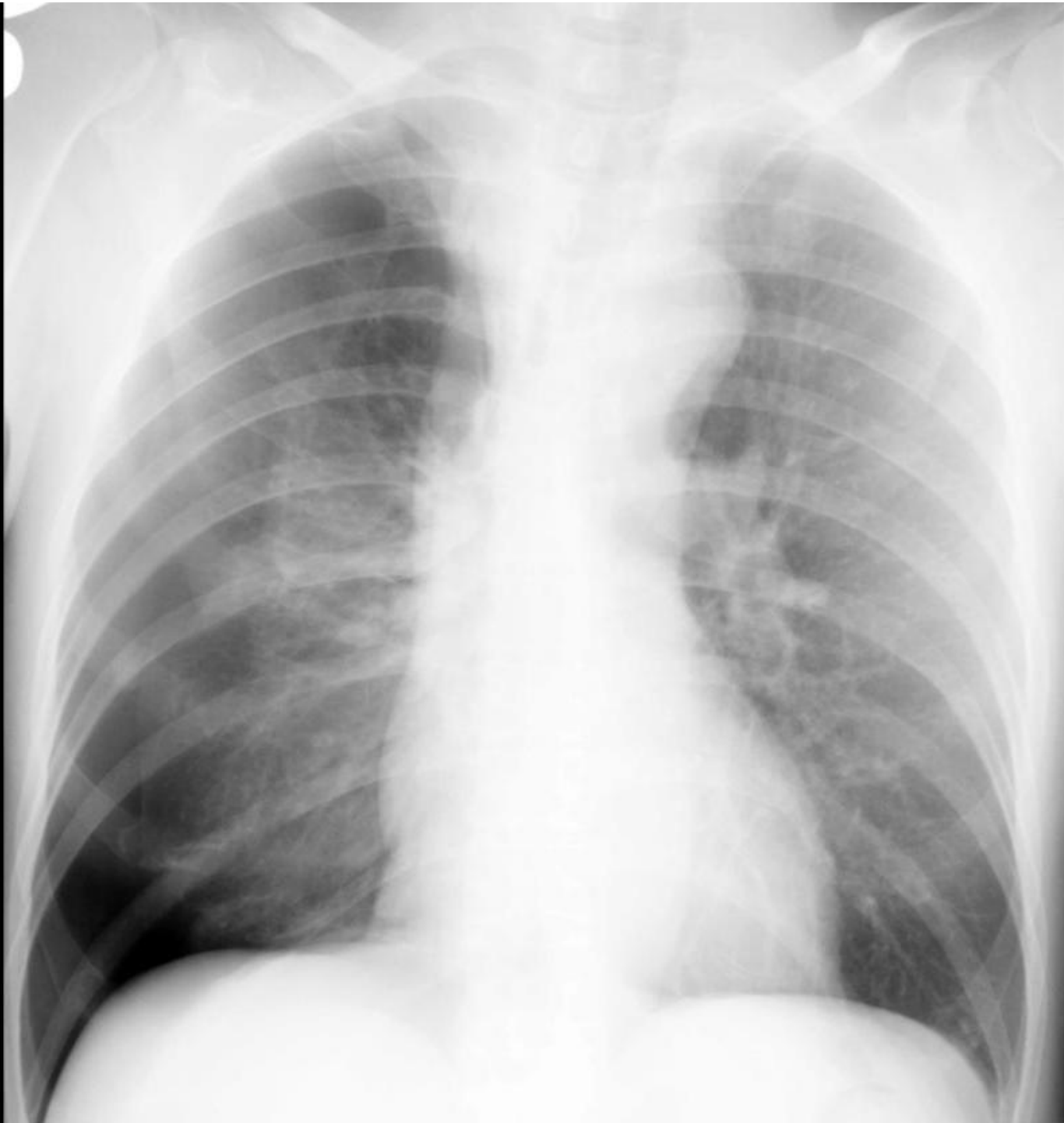


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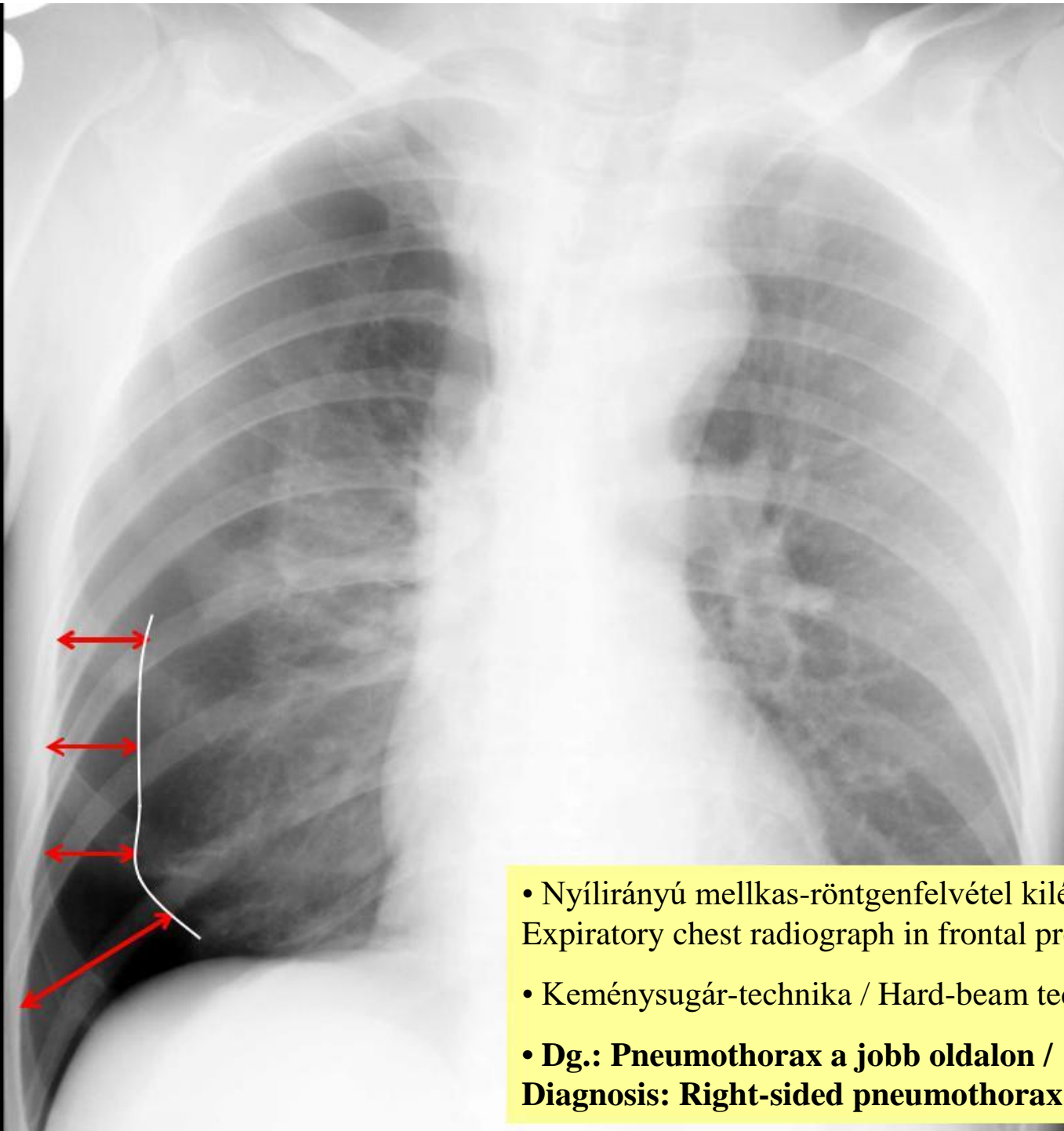


- Nyílrányú és bal oldali mellkasi röntgenfelvétel álló helyzetben (PA), keménysugár-technika (120–140 keV) / Upright & left sided chest radiograph in frontal projection (PA), hard-beam technique (120– 140 keV)
- Jobb kép: Rekeszívék és laterális sinusok nem differenciálhatók (*nyilak*) / Right image: Diaphragm and lateral sinuses can not be differentiated (*arrows*)
- **Dg.:** Bal kép: szabályos morfológia, Jobb kép: jobb oldalon több, bal oldalon kevesebb pleuralis folyadék / **Diagnosis:** Left image: normal morphology, right image: pleural effusion (more on the right, less on the left side)

32.



32.



- Nyílrányú mellkas-röntgenfelvétel kilégzésben / Expiratory chest radiograph in frontal projection
- Keménysugár-technika / Hard-beam technique
- **Dg.: Pneumothorax a jobb oldalon /**  
**Diagnosis: Right-sided pneumothorax**



33.

HELYSZINI

Mellkas helyszíni felvétele  
3056\*2544  
DX

R

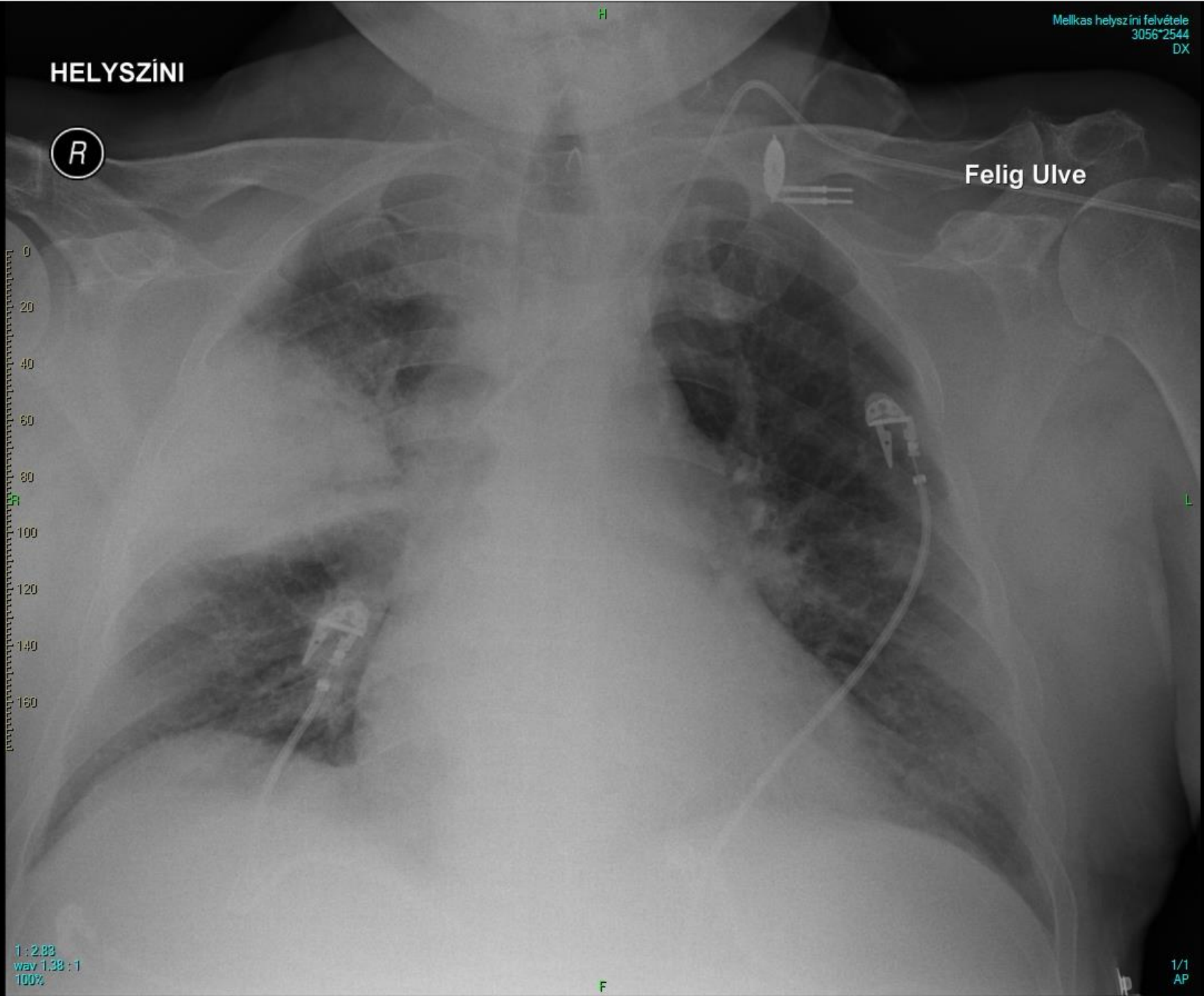
Felig Ulve

0  
20  
40  
60  
80  
100  
120  
140  
160

1 : 2.88  
wav 1.38 : 1  
100%

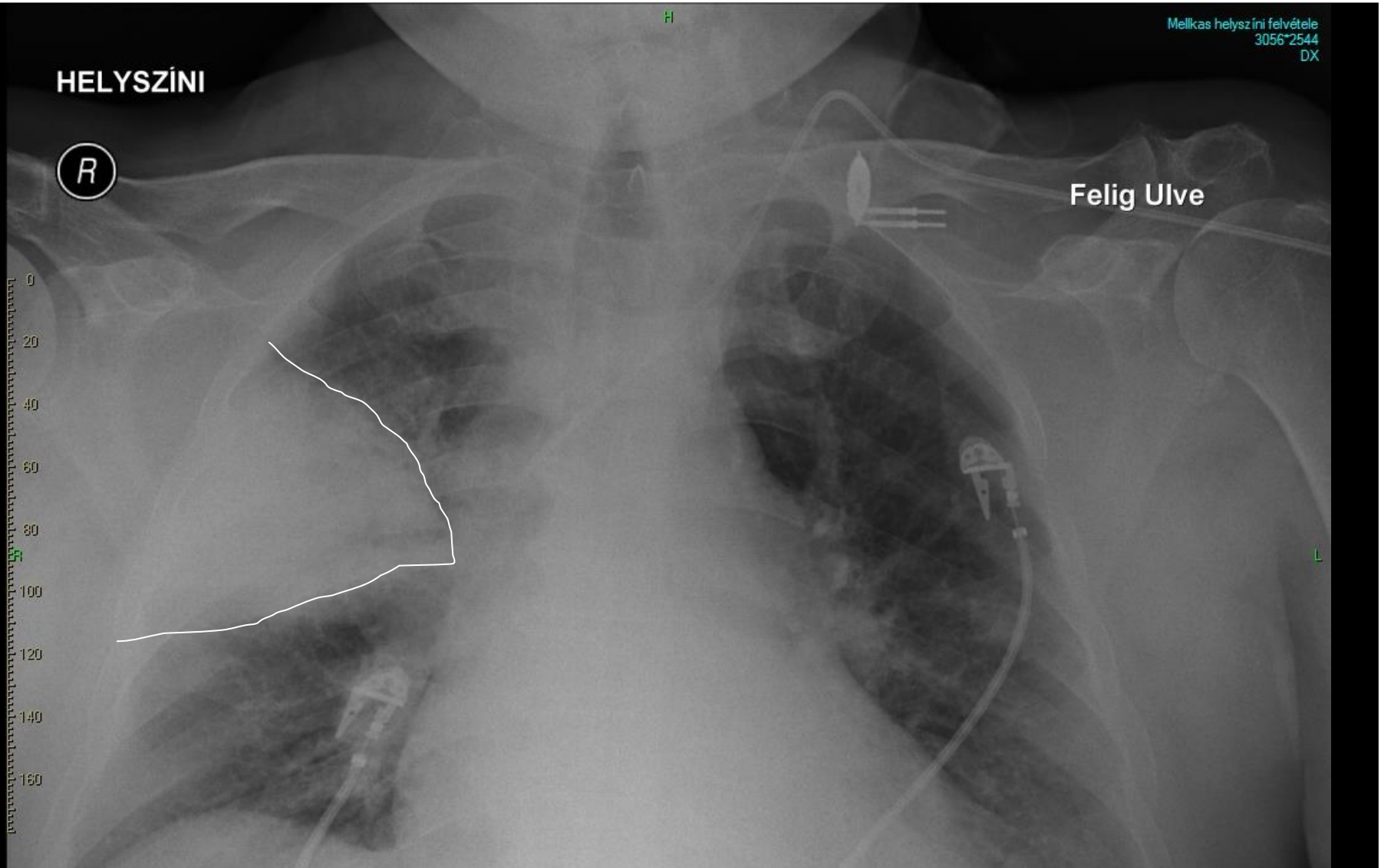
F

1/1  
AP



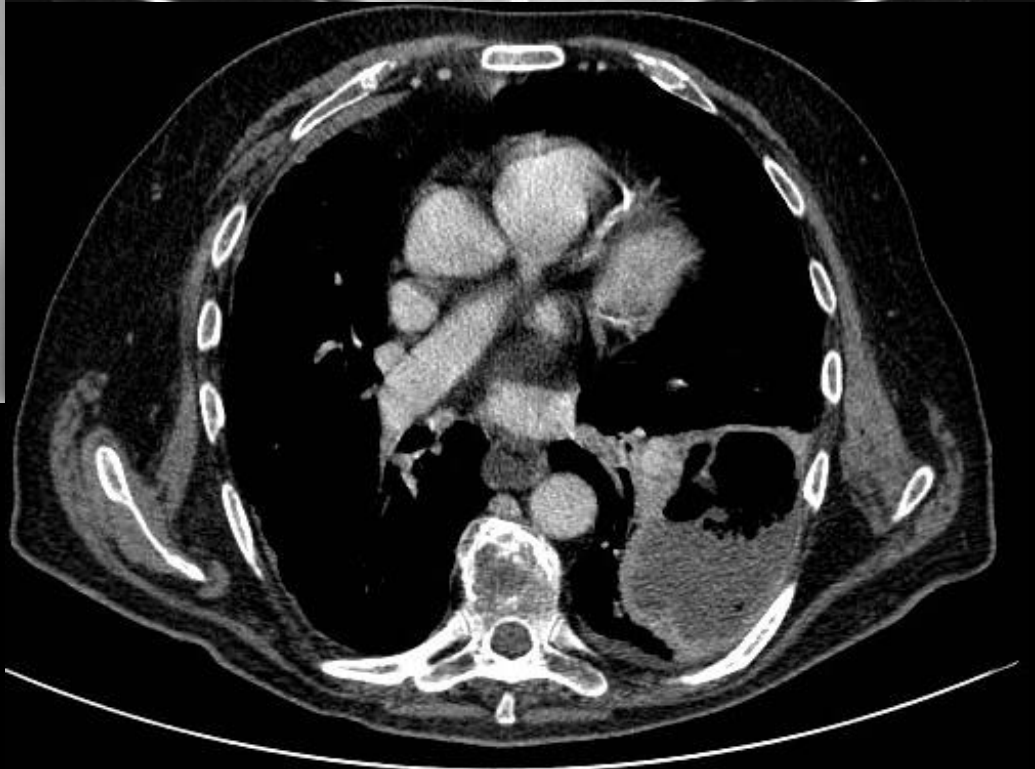
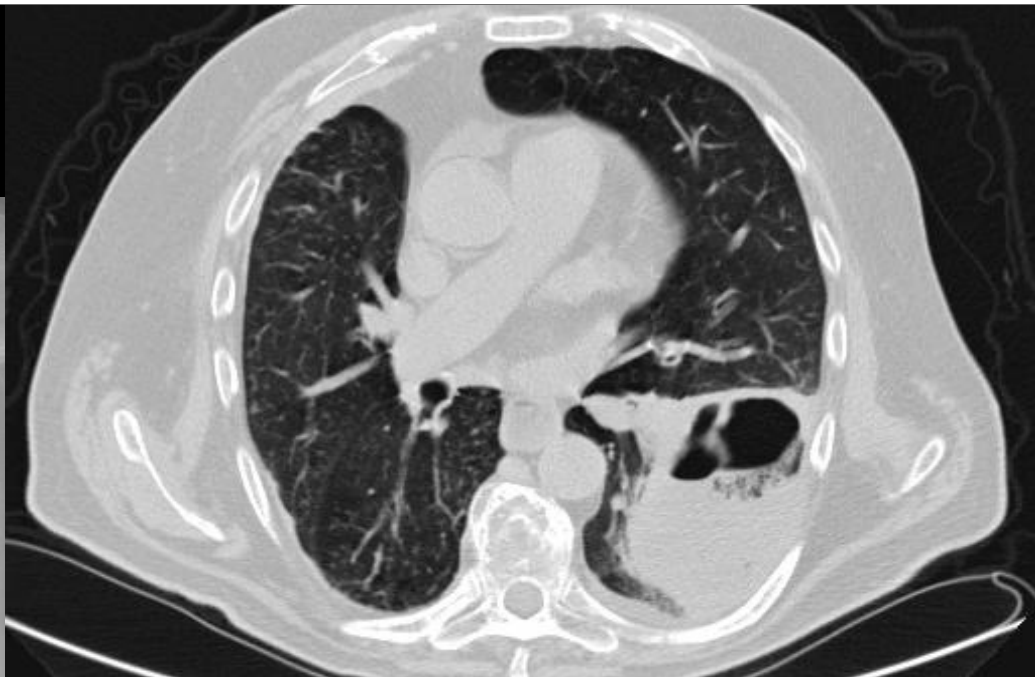
33.

HELYSZÍNI



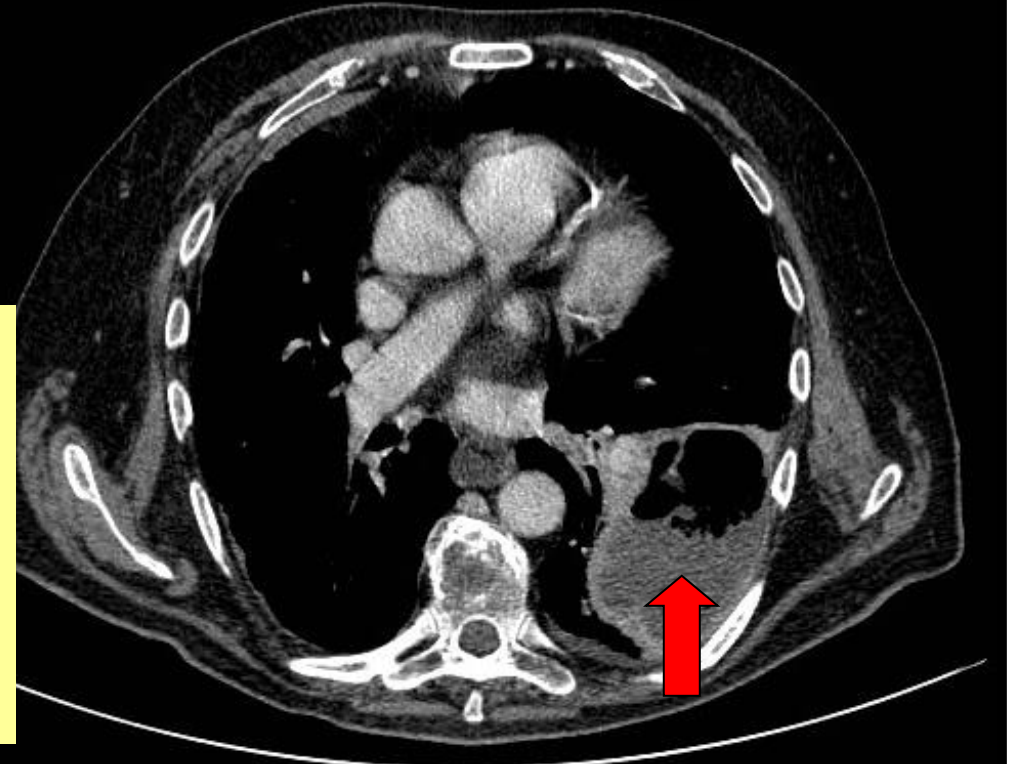
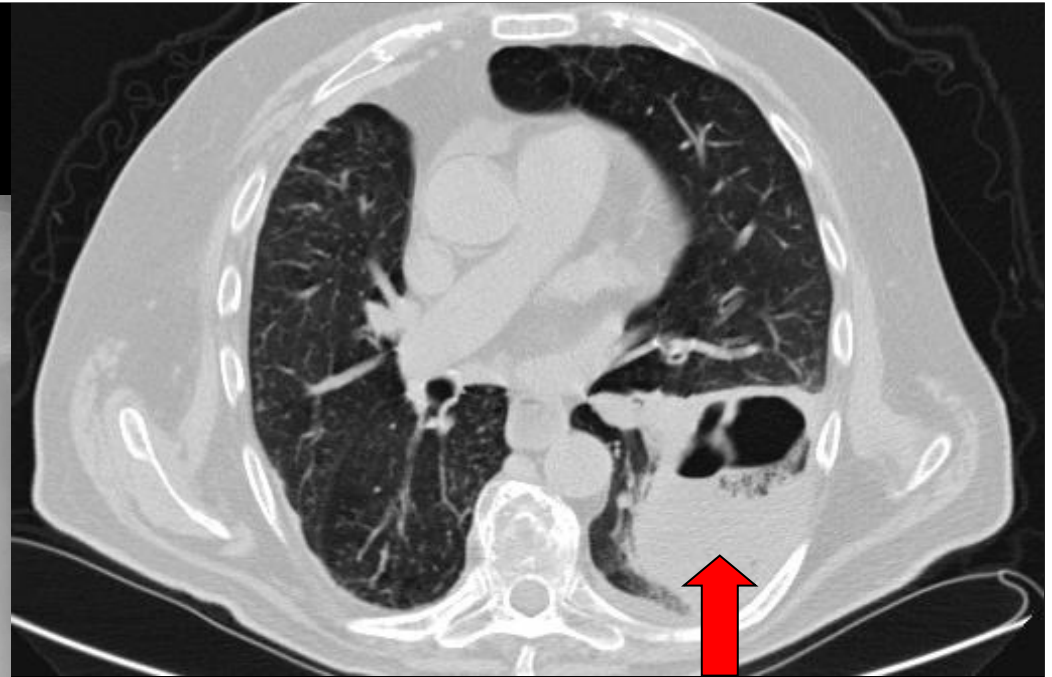
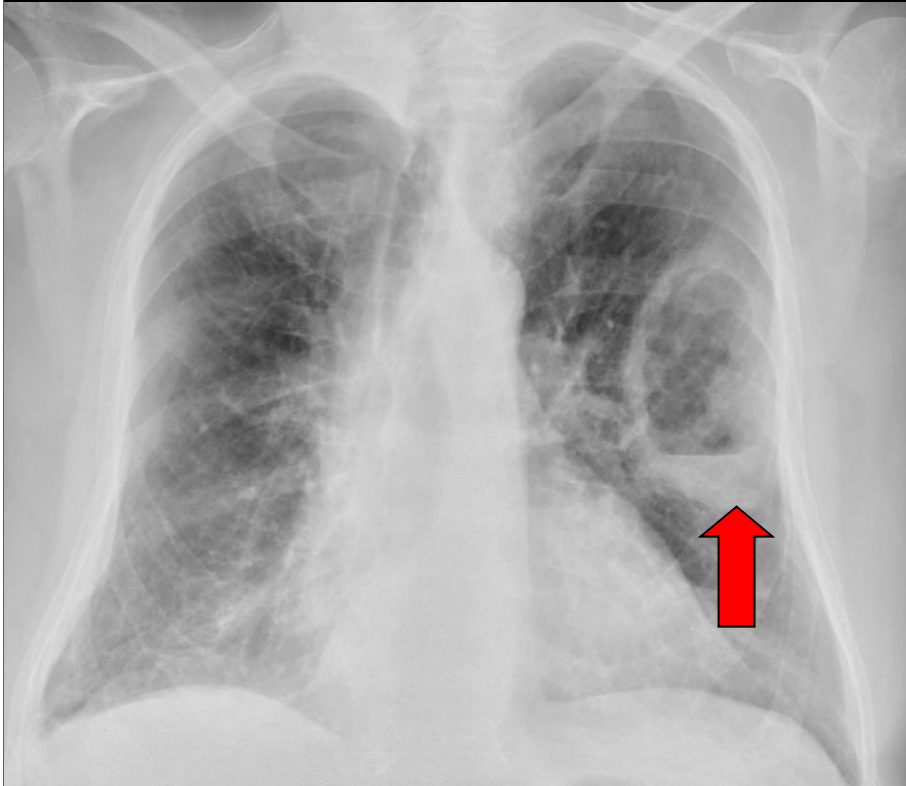
- Helyszíni mellkas-röntgenfelvétel (AP, fekve) / Chest radiograph in AP projection (lying position at ICU)
- Keménysugár-technika / Hard-beam technique
- **Dg.: Jobb oldali infiltratív transzparenciacsökkenés: pneumonia lobaris l.d. / Diagnosis: Right infiltrative opacity (loss of transparency): right sided lobar pneumonia**

34.





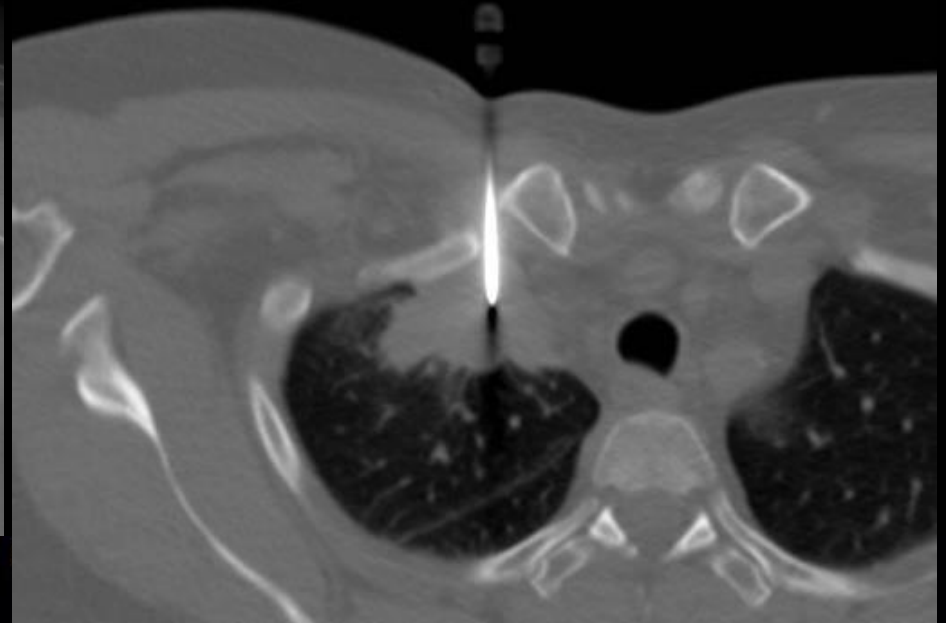
34.



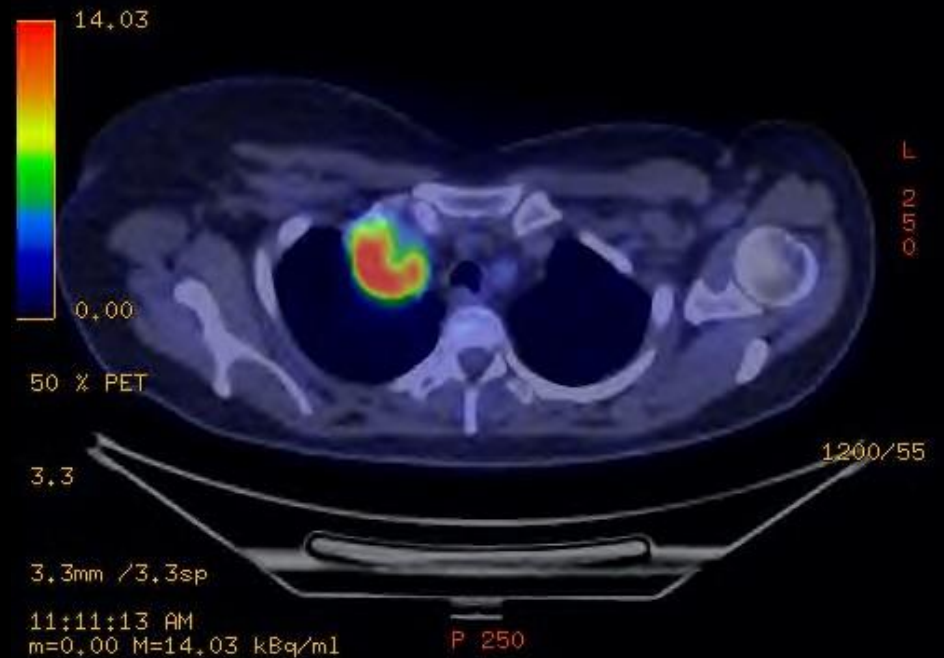
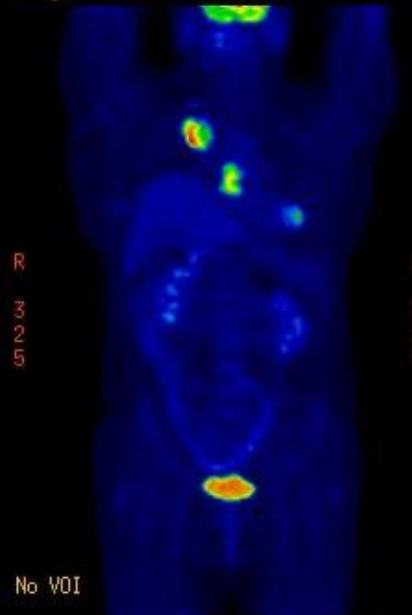
- Bal: nyílrányú mellkas-röntgenfelvétel (PA) /  
Left: upright chest X-ray in frontal projection
- Jobbra fent és lent: kontrasztanyagós mellkas-CT, tüdő  
és mediastinum ablak, axialis sík, halmozó falú  
abscessus / Right up and down: contrast enhanced CT of  
the chest, lung and mediastinal window, axial, contrast  
enhancing wall
- Dg.: Bal oldali tüdőabszcessus /  
Diagnosis: Left sided lung abscess



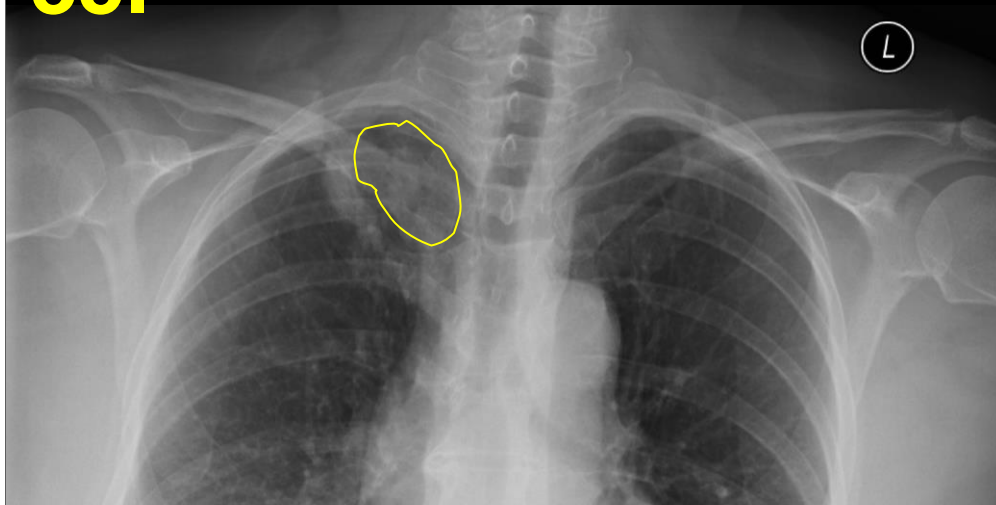
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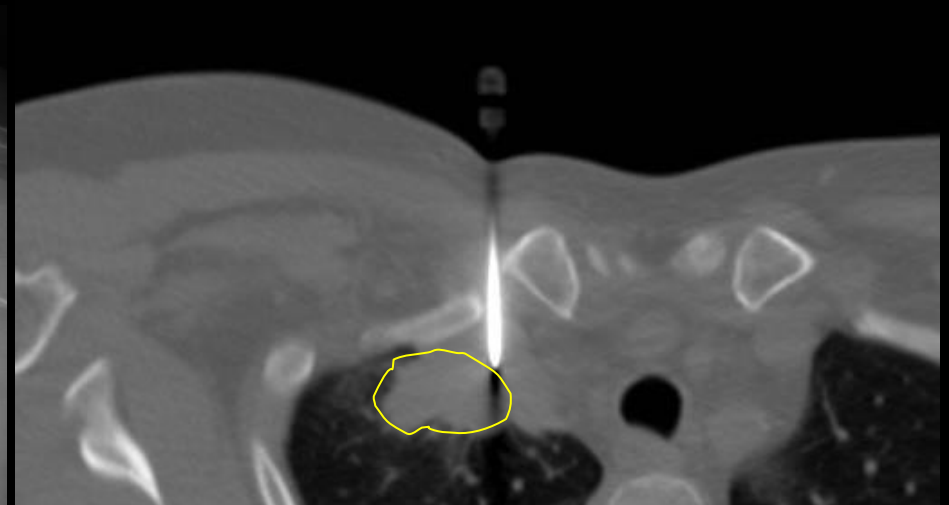
Weighted HD MIP No cut  
Weighted Factor Medium



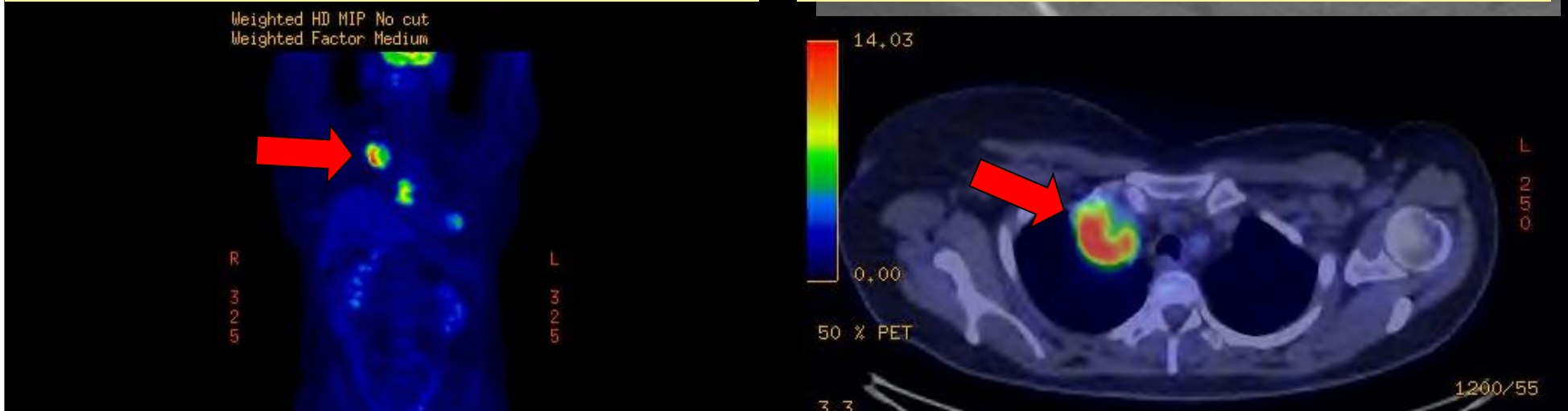
35.



• Nyílrányú mellkas-röntgenfelvétel (PA), jobb tüdőcsúcsban spikulált árnyék / Upright chest X-ray in frontal projection, spiculated lesion in the right lung apex

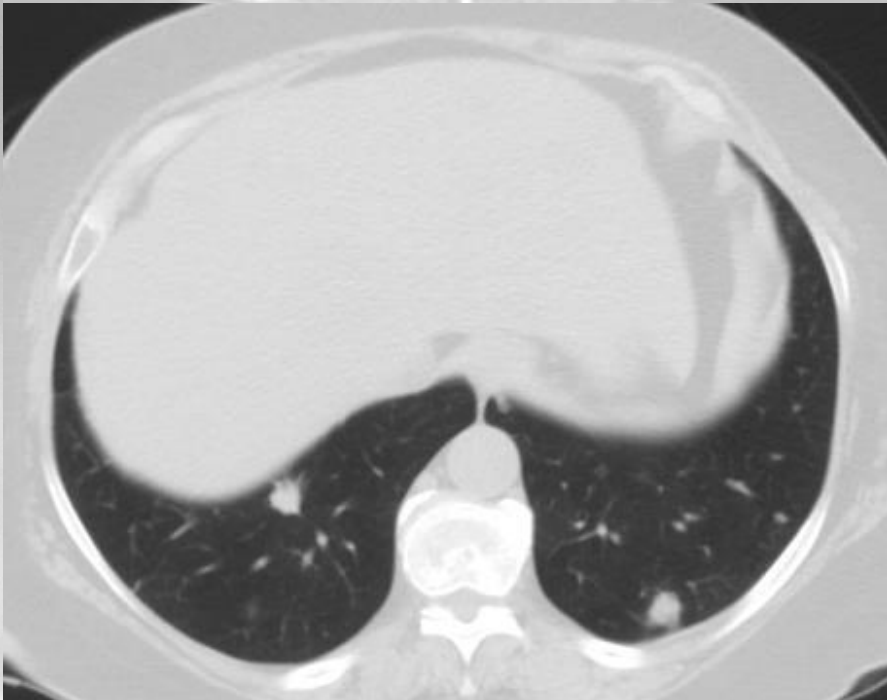
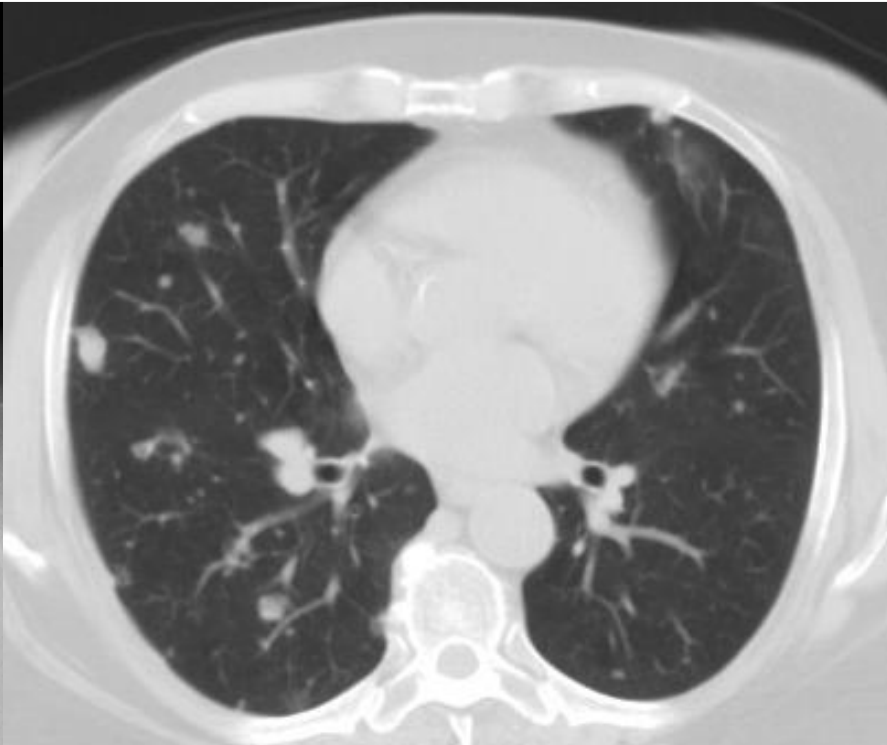


• Axialis síkú mellkas CT, core biopsia a tüdőcsúcsi térfoglalásból / Chest CT, core biopsy from the right apical mass



• PET-CT, FDG-halmozás a tüdőcsúcsi tumorban (nyíl) / PET- CT, increased fluorodeoxyglucose (18F-FDG) uptake in the right apical mass (arrow)  
• Dg.: Jobb tüdőcsúcsi (Pancoast) tumor /Diagnosis: Right apical lung cancer (Pancoast tumor)

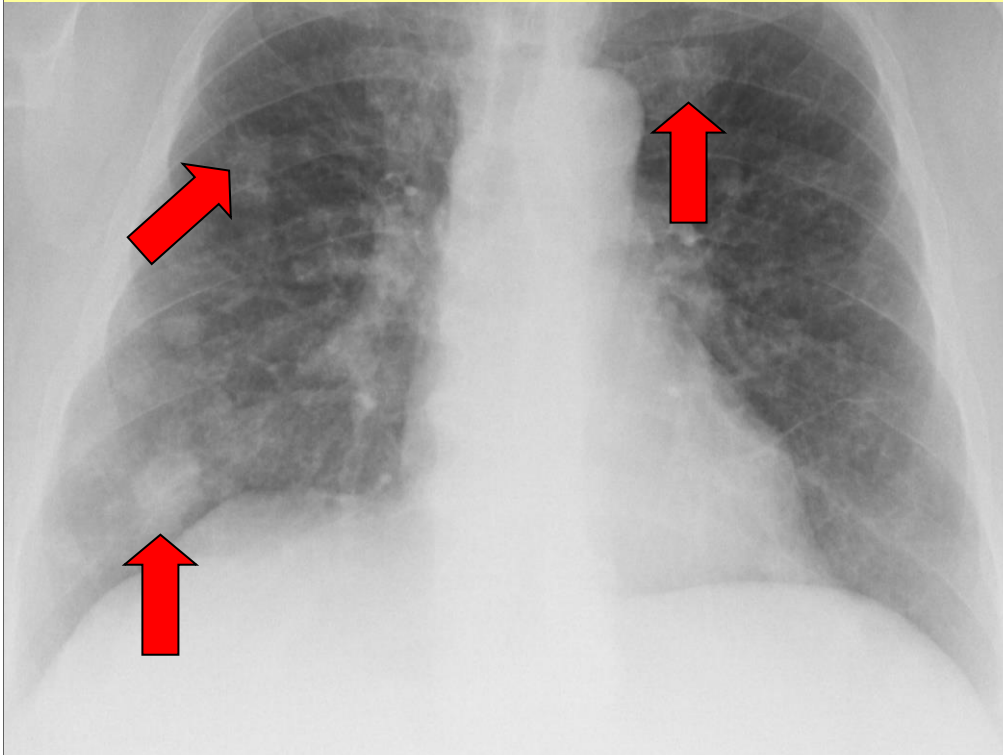
36.



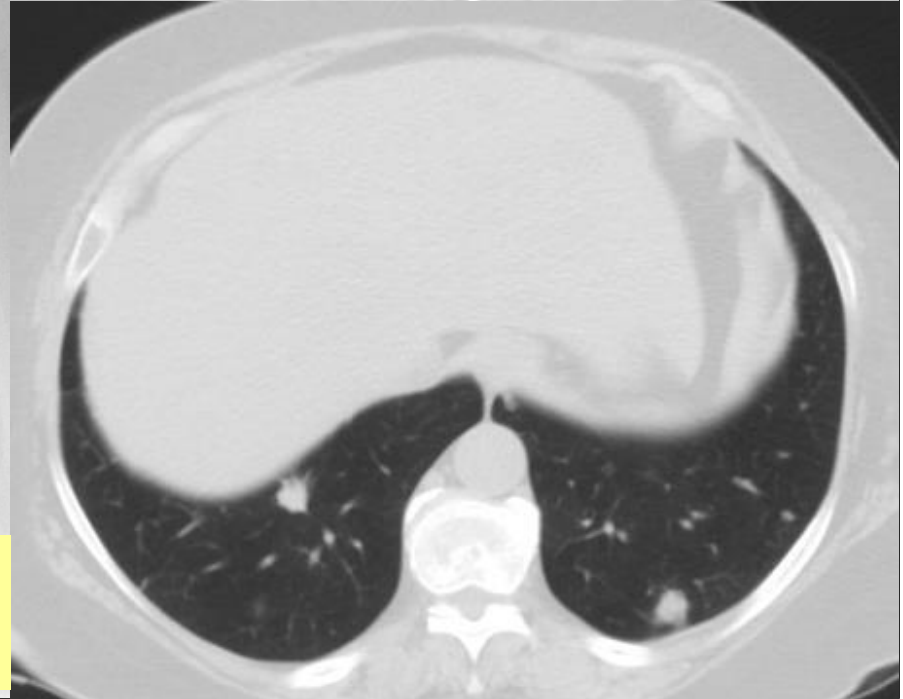
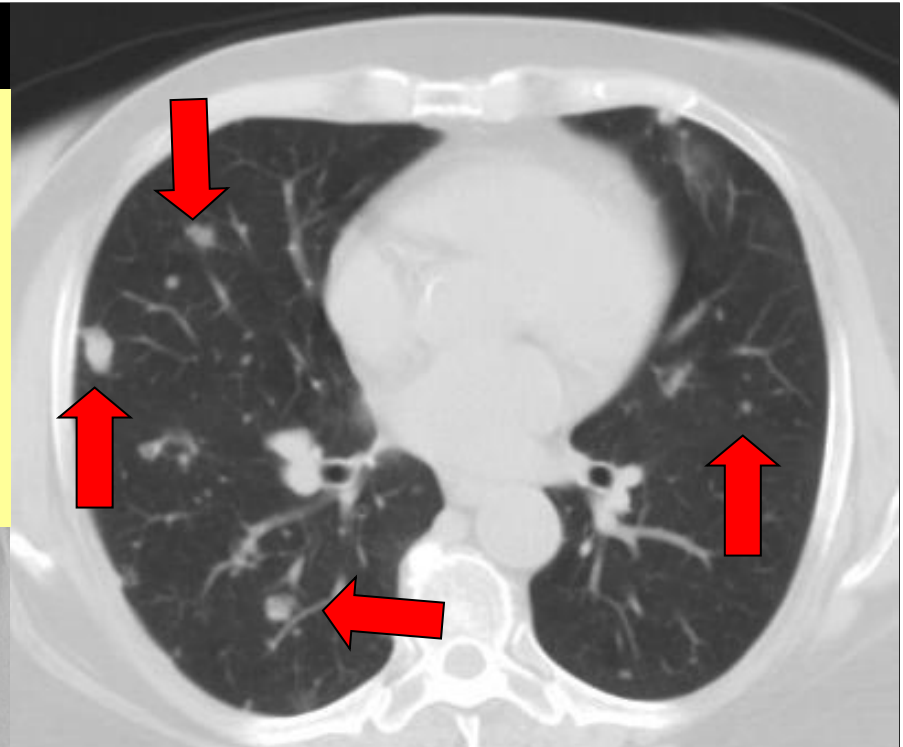


# 36.

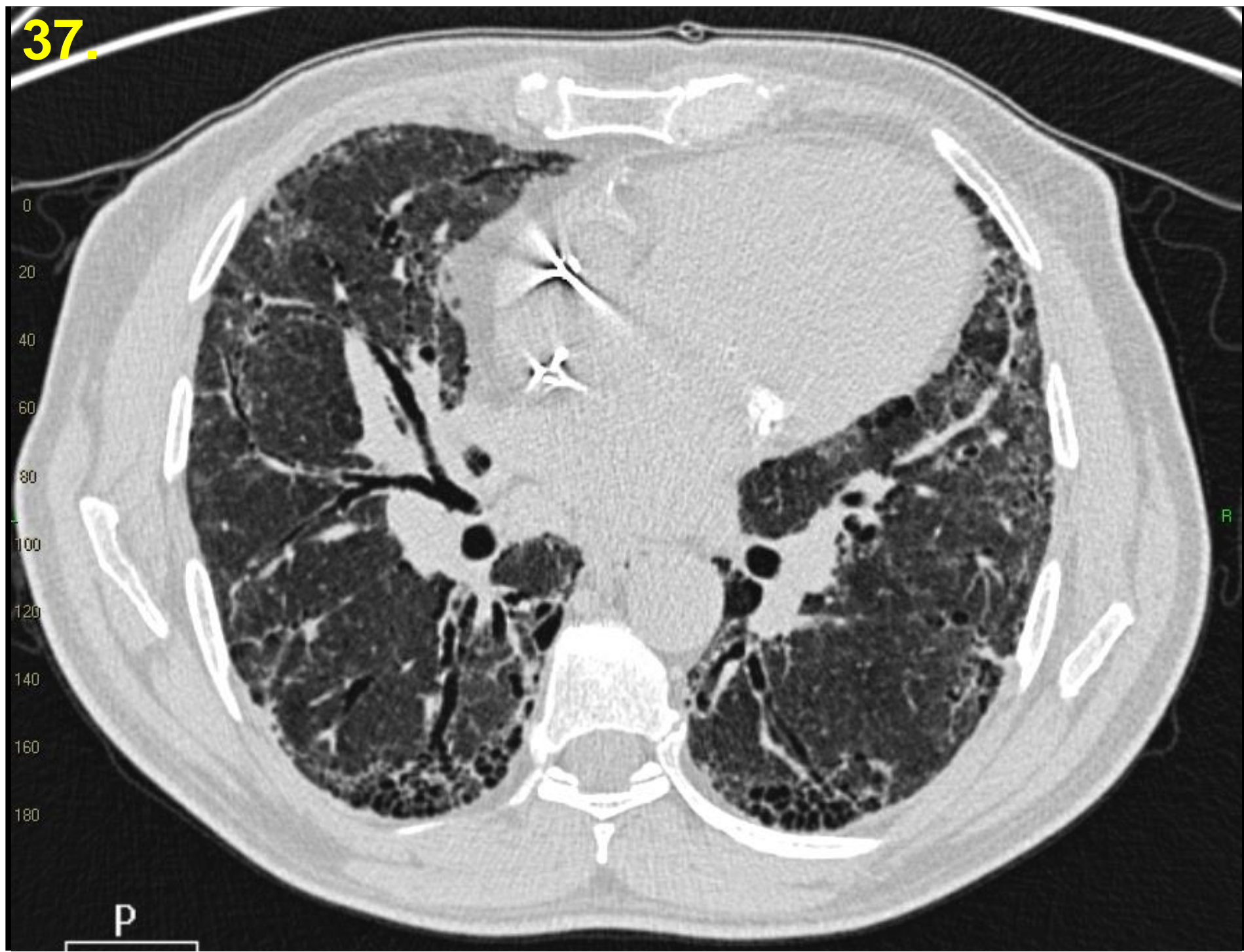
- Bal: nyílirányú mellkas-röntgenfelvétel (PA) / Left: upright chest X-ray in frontal projection
- Jobbra fent és lent: natív mellkas-CT, tüdő ablak, axialis sík / Right up and down: nonenhanced CT of the chest, lung window, axial
- Rtg: Multiplex kerekded árnyékok mindkét oldalon / X-ray: multiplex rounded lesions bilaterally
- CT: Multiplex különböző méretű lágyrészképletek / CT: multiple soft tissue lesions with rounded shape and different sizes



• Dg.: Multiplex tüdő metastasisok (anamnézis: colon tumor) / Diagnosis: Multiple lung metastases (colon cancer in the anamnesis)



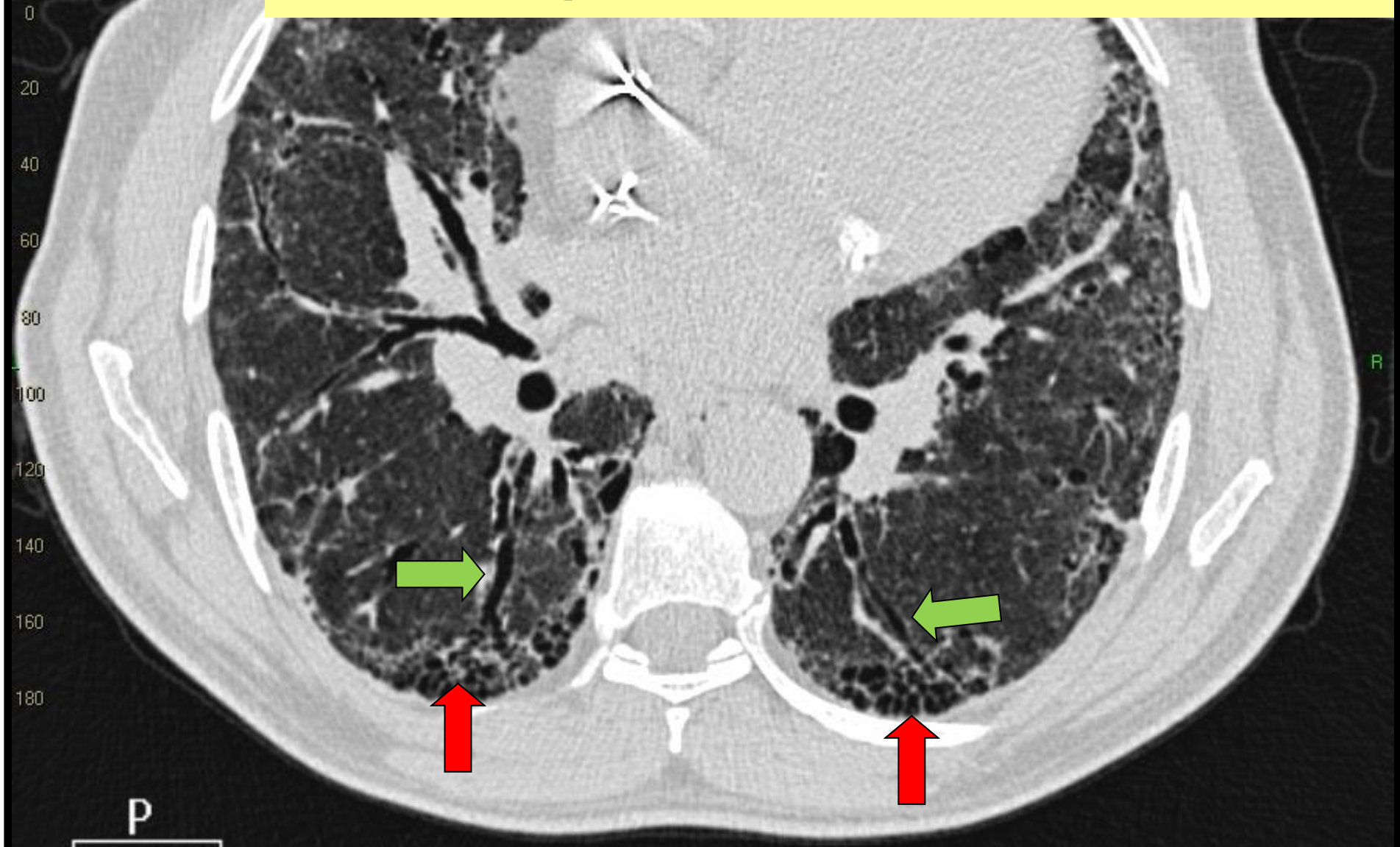
37.





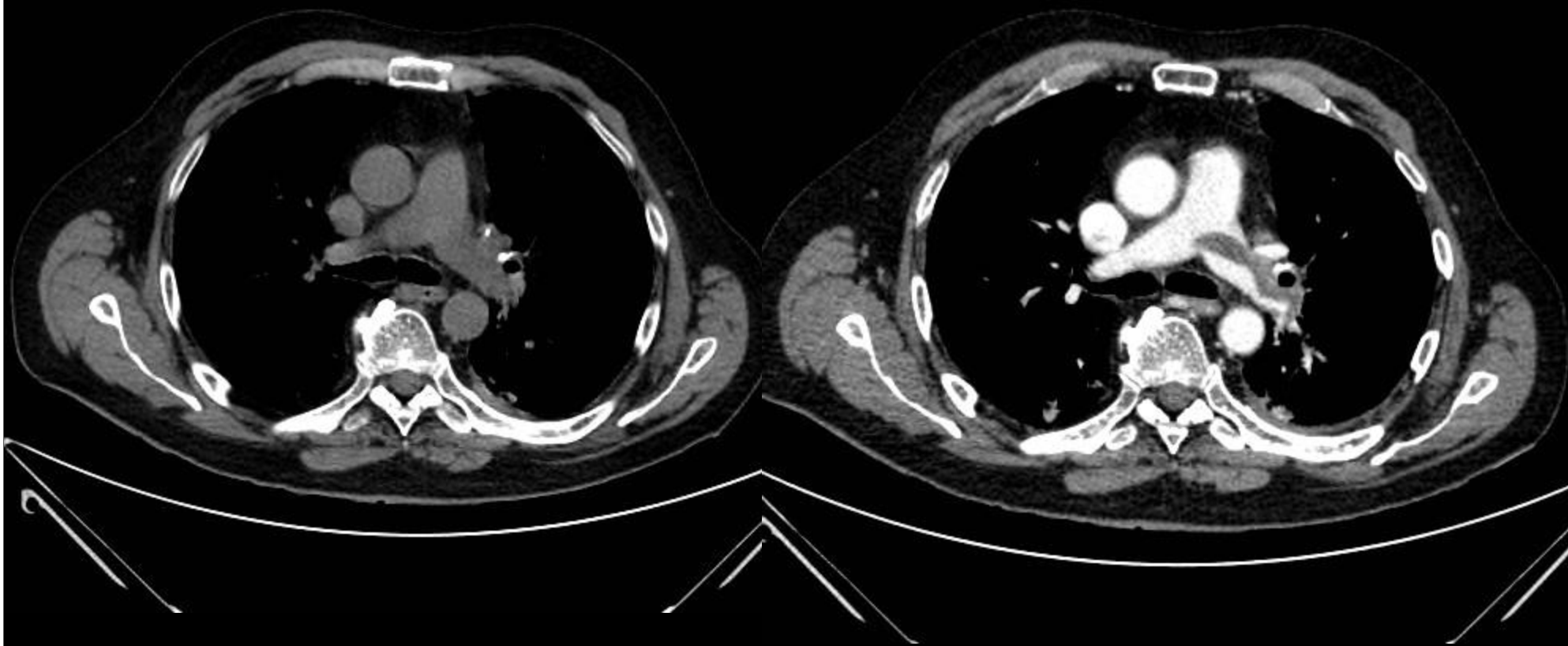
37.

- Tüdő HRCT vizsgálat, axialis sík, tüdő ablak / HRCT of the lung, axial view, lung window
- Kétoldali dorsobasalis honeycombing (*piros nyíl*), tractors bronchiectasiával (*zöld nyíl*) / Bilateral dorsobasal honeycombing pattern (*red arrow*), traction bronchiectasis (*green arrow*)
- Dg.: Tüdőfibrosis (UIP-mintázat) / Diagnosis: Pulmonary fibrosis (UIP-pattern, UIP=Usual interstitial pneumonia)

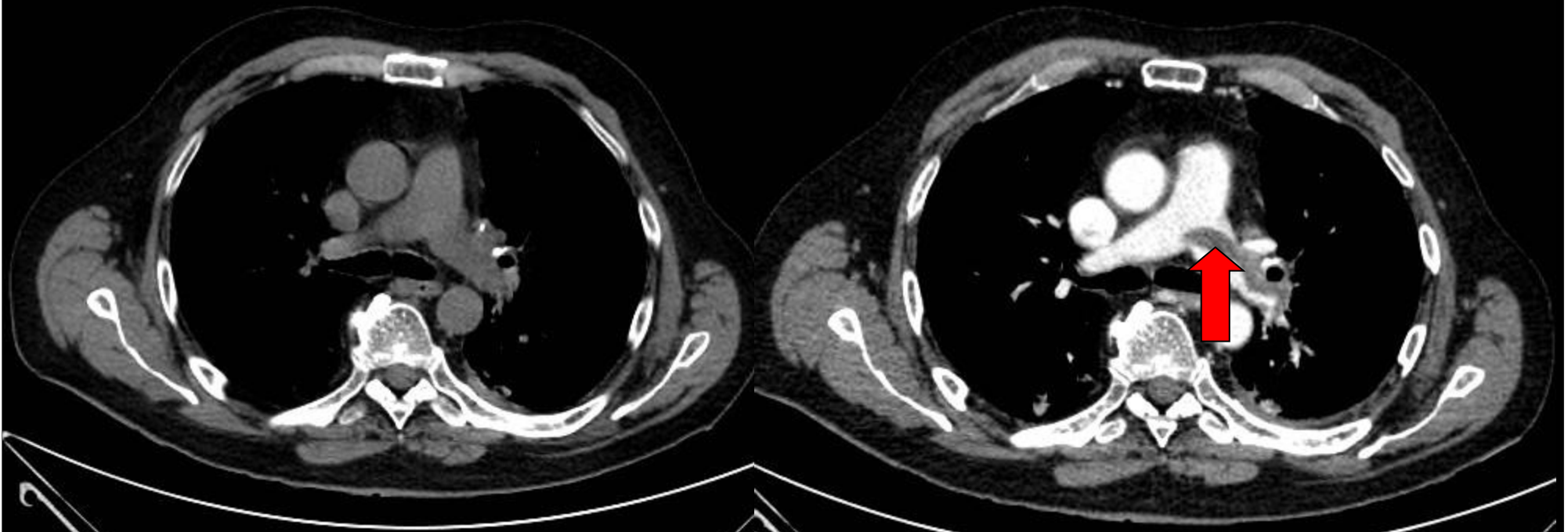




38.

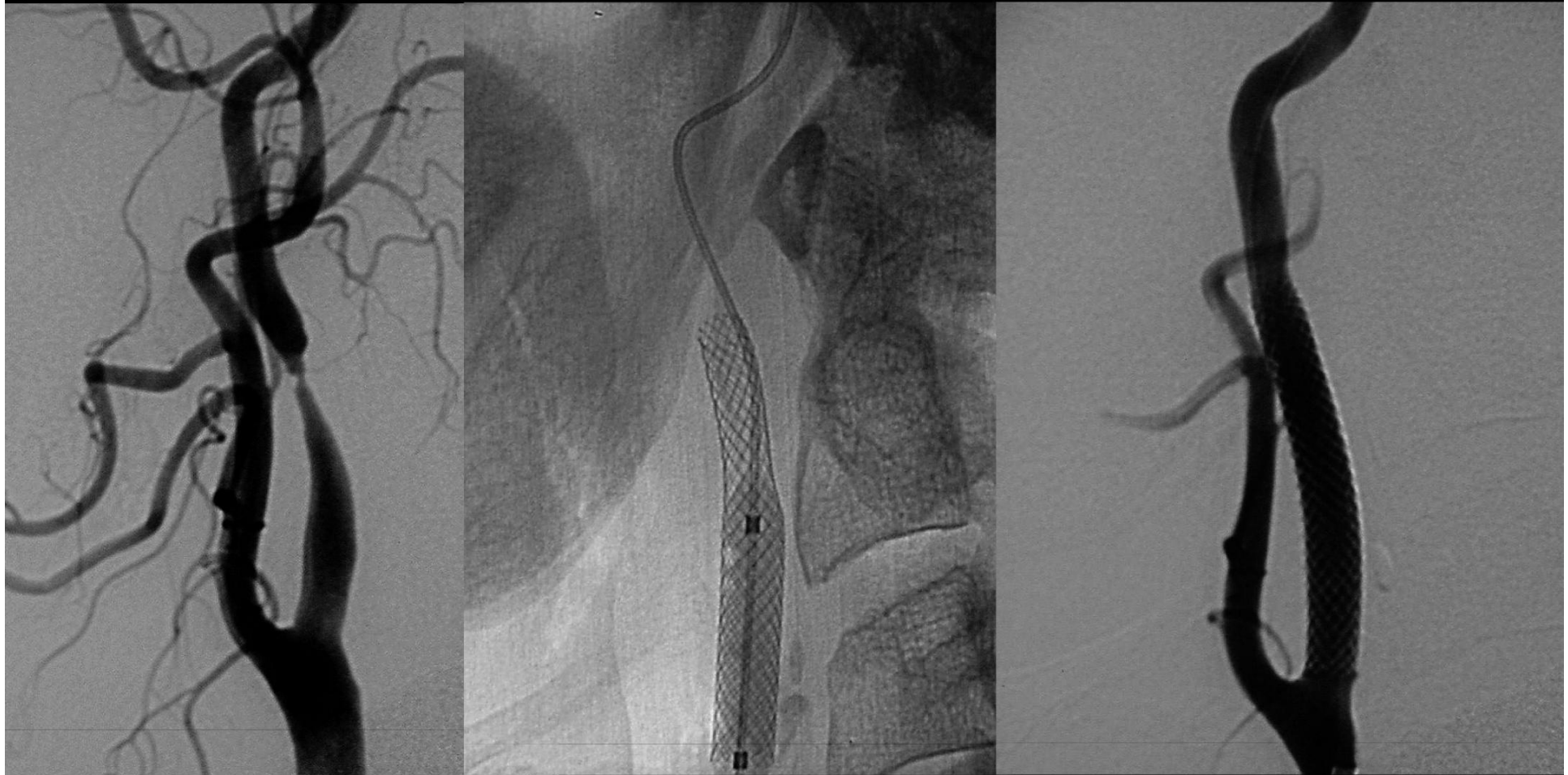


38.



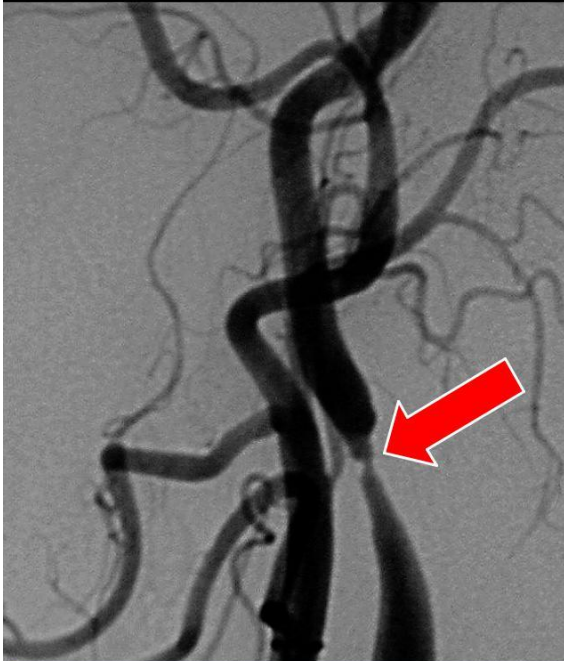
- Pulmonális CT-angiográfia (bal: natív, jobb: pulmonális artériás fázisú posztkontrasztos (CTA) / Pulmonary CT-angiography (left image: nonenhanced series, right image: contrast-enhanced series in pulmonary arterial phase (CTA)
- Masszív telődéskiesés a bal a. pulmonalis-főtörzsben / Large filling defects in the left main pulmonary artery
- **Dg.: Pulmonalis embolia / Diagnosis: Pulmonary embolism**

39.





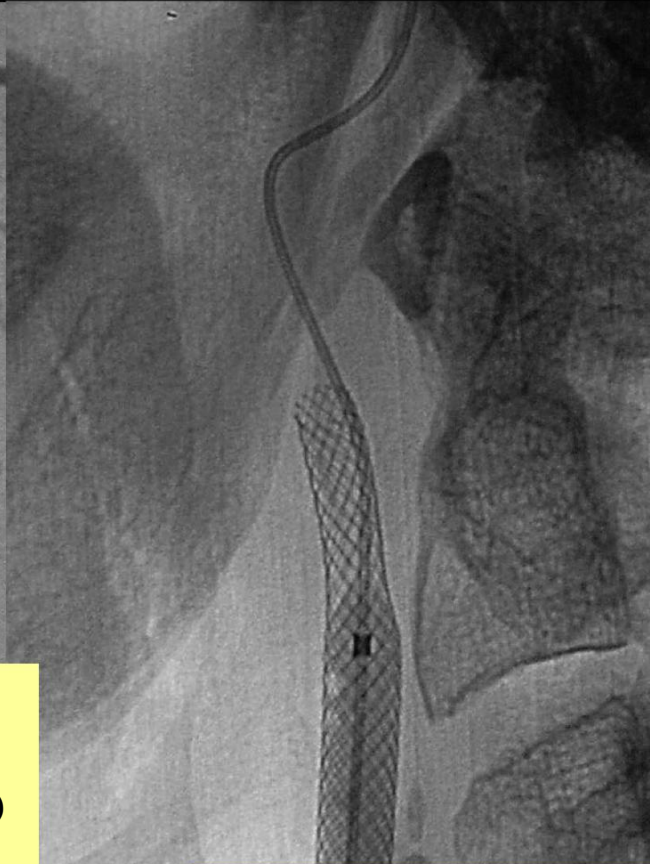
39.



• Digitális szubtrakciós angiográfia (DSA) / Digital subtraction angiography (DSA)

• Carotisrendszer / Carotid system

• Szignifikáns stenosis az a. carotis internán / Significant stenosis on internal carotid artery



• **Dg.: A. carotis interna-tágítás stentbehelyezéssel /**  
**Diagnosis: Stenting of the internal carotid artery**

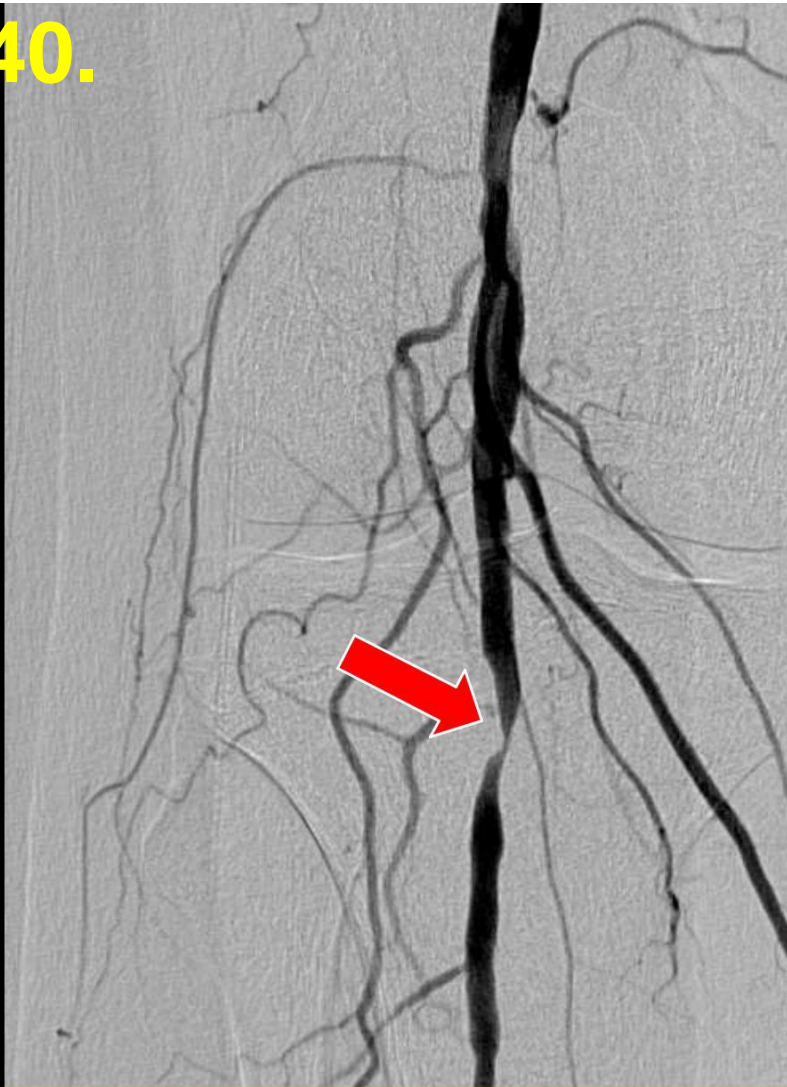


40.





40.



- DSA
- A. poplitea / Popliteal artery
- Dg: Szignifikáns stenosis a jobb a. popliteán /  
Significant stenosis on the right popliteal artery



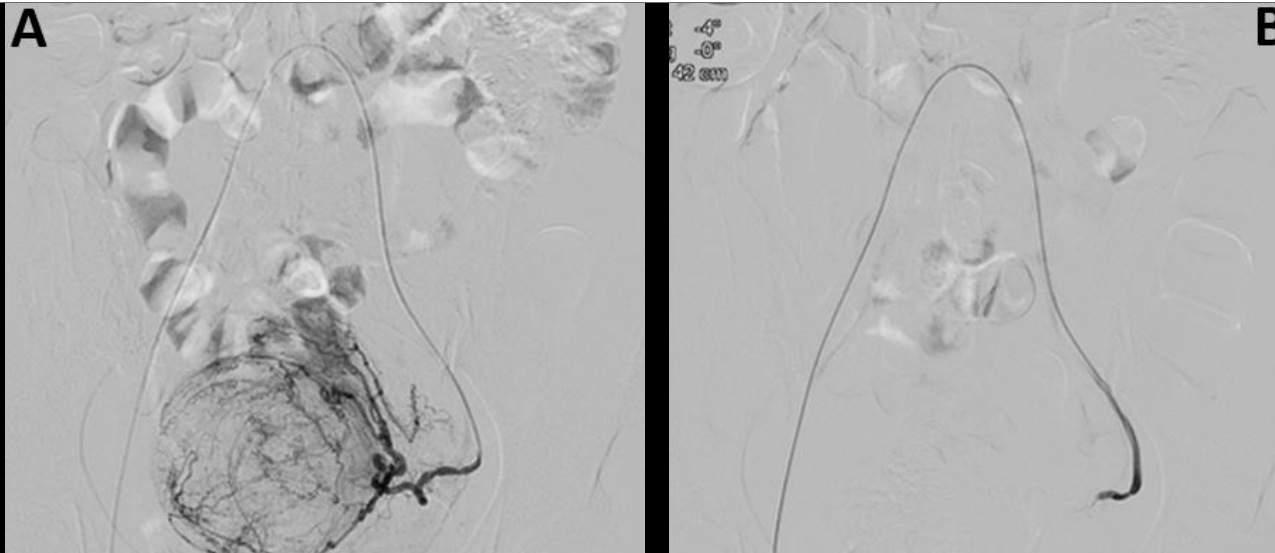
- DSA + PTA
- **Dg.: Jobb a. poplitea PTA után /**  
**Diagnosis: Right popliteal artery after PTA**



41.



41.



- Angiográfia, bal a. uterina embolizáció előtt (bal kép) és embolizációs partikulumok (500-700  $\mu\text{m}$  PVA szemcsék) befecskendezését követően a. uterina elzáródása látható (jobb kép) / Angiogram of the left uterine artery before embolization (left image). Injection of the embolic material (500-700  $\mu\text{m}$  PVA particles) resulted in stasis of the uterine artery (right image)



- T2 súlyozott MR kép, sagittalis sík. Bal kép: Submucosalis (*hosszú nyíl*) és subserosus (*rövid nyíl*) myomagöbök, melyek embolizáció előtt. Jobb kép: 6 hónappal embolizáció után a submucosus myomagöb jobban megkisebbedett (*hosszú nyíl*), mint a subserosus göb. / Left image: Preembolization sagittal T2-weighted image showing submucosal (*long arrow*) and subserosal (*short arrow*) fibroids. Right image: Six months after UAE, the submucosal fibroid (*long arrow*) had undergone a greater volume reduction than the subserosal fibroid (*short arrow*)
- **Dg: Myoma embolizáció / Diagnosis: Myoma embolisation (uterine artery embolisation, UAE)**

42.

L

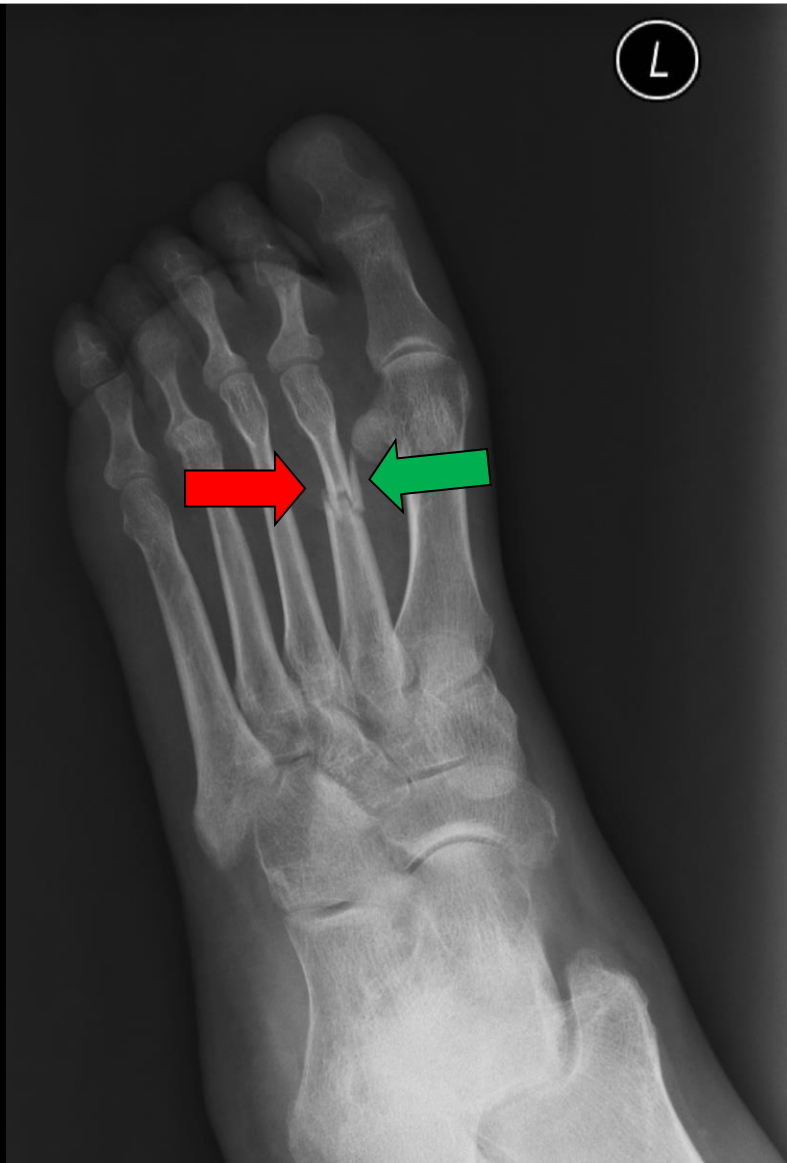


L





42.



• A bal II-es metatarsus középső harmadában minimális dislocatioval járó ferde törés (*piros nyíl*). Mediálisan a csontkontúr mentén csontfragmentum figyelhető meg (*zöld nyíl*). / Oblique fracture of the left 2nd metatarsus with minimal dyslocation (*red arrow*). Small bone fragment is visible next to the medial bone contour (*green arrow*).

• **Dg.: II. metatarsus törése / Diagnosis: Fracture of the 2nd metatarsus**

43.



# 43.

- Bal femur distalis metaphysisében destruktív csontfolyamat, mely a lágyrészeire is terjed. Periostealis reakció figyelhető meg, Codman-háromszöggel (*nyíl*). / Inhomogen destructive bone mass in the metaphysis of the left femur with invasion to the surrounding soft tissue. Codman triangle is also visible /sign of periosteal reaction/ (*arrow*).
- **Dg: Femur osteosarcoma Codman háromszöggel / Diagnosis: Osteosarcoma with Codman triangle in femur**





44.

E3



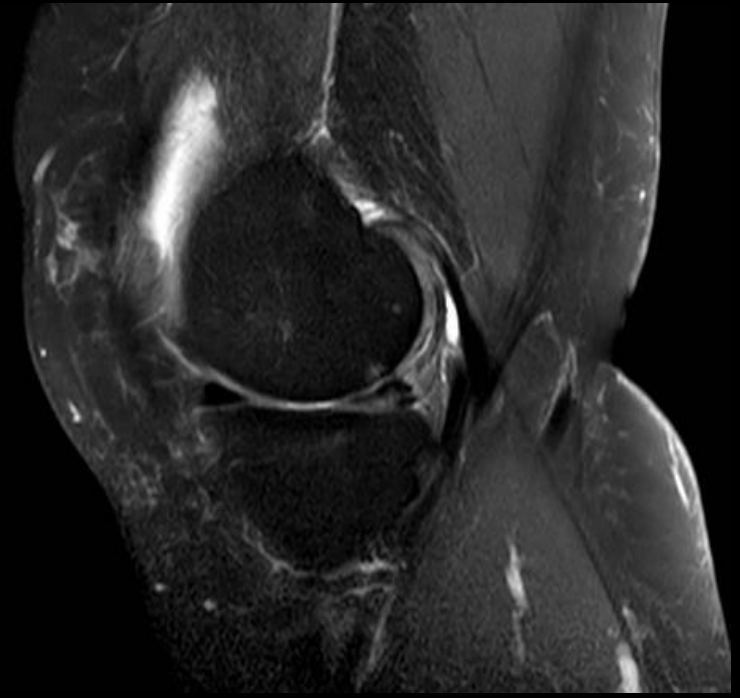
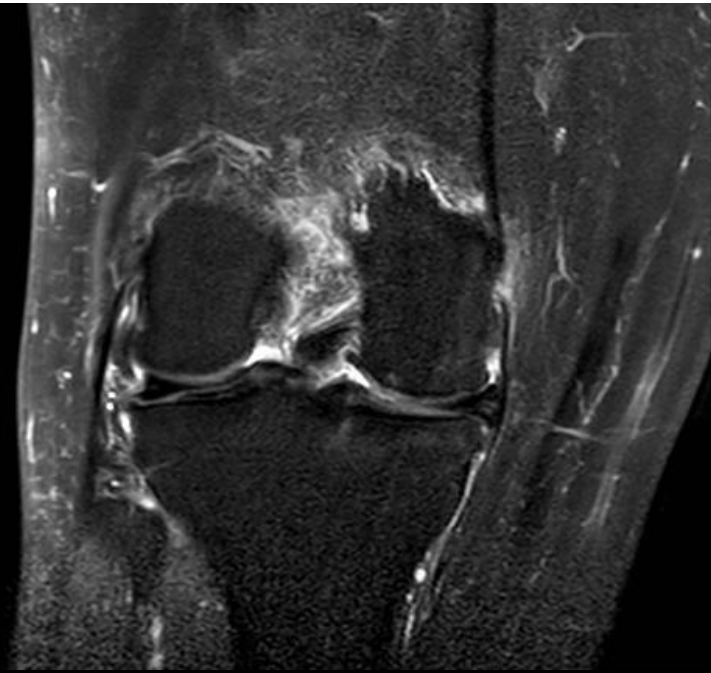
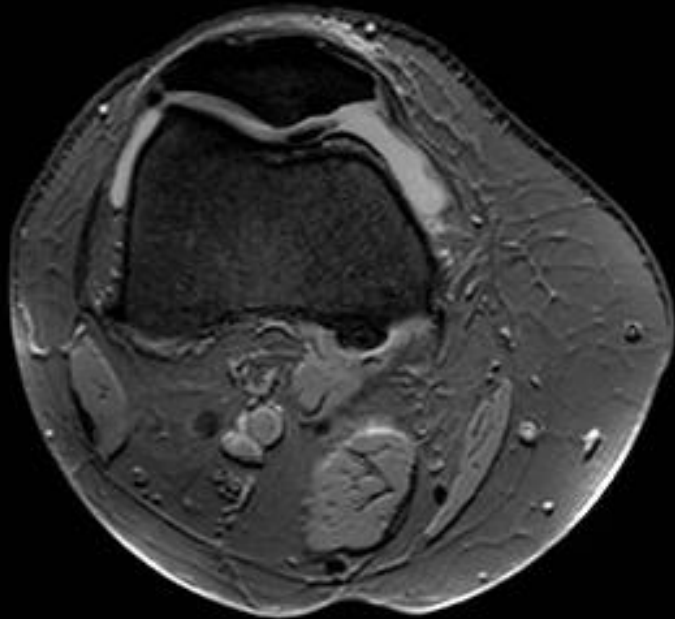
44.

E3



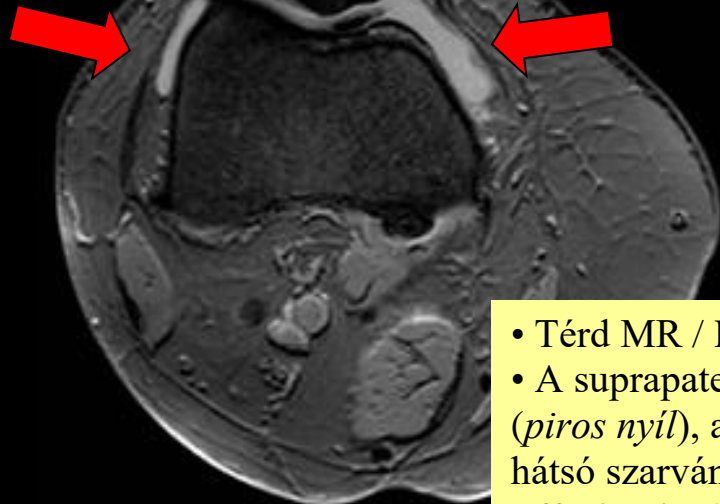
- A bal hallux kétirányú röntgenfelvétele / Radiograph of the left hallux in two projections
- A tuberositas distalis (= processus unguicularis) csontállománya elmosódott határral nagyrészt felszívódott / Marked ill-defined bone resorption in distal tuberosity (= unguinal process)
- Lágyrész-kiszéledés / Soft tissue swelling
- **Dg./Diagnosis: Osteomyelitis**

45.

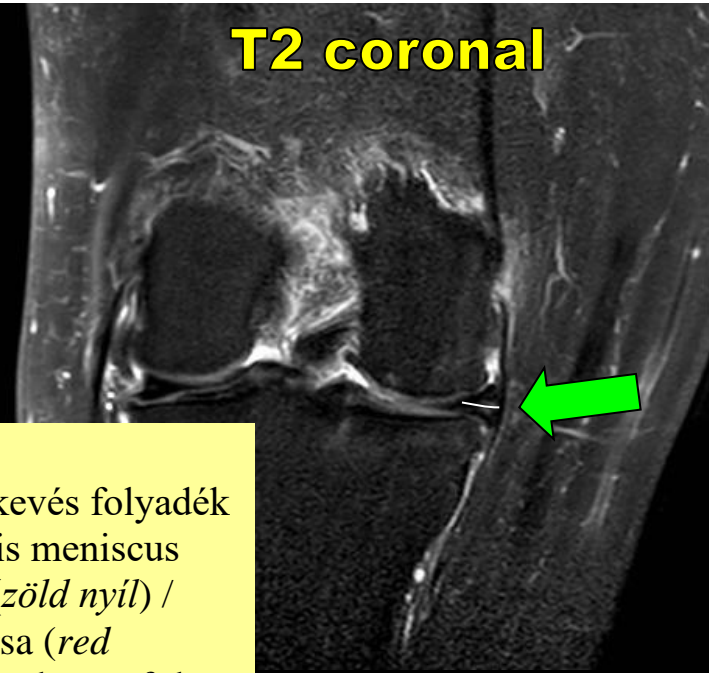




# 45. PD axial

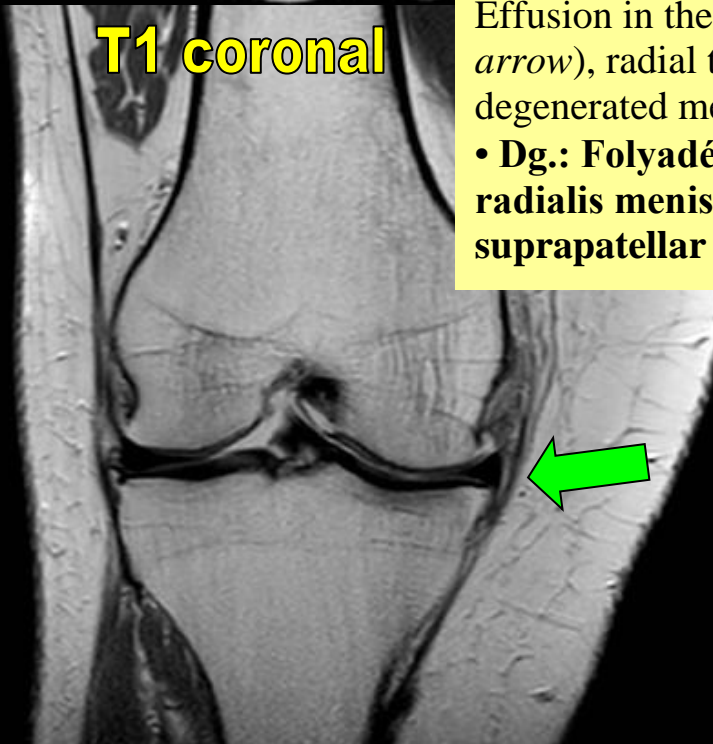


# T2 coronal

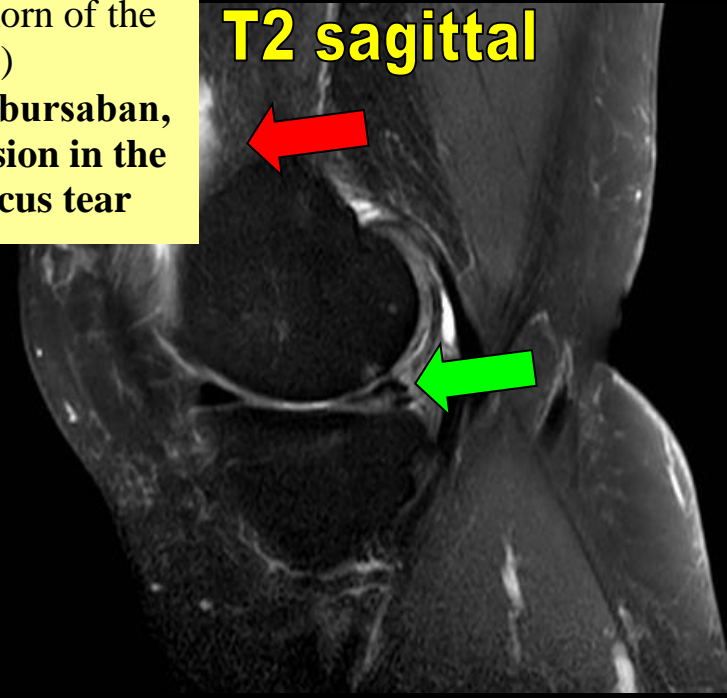


- Térdr MR / Knee MRI
- A suprapatellaris recessusban kevés folyadék (*piros nyíl*), a degenerált medialis meniscus hátsó szarván radiális szakadás (*zöld nyíl*) / Effusion in the suprapatellar bursa (*red arrow*), radial tear in the posterior horn of the degenerated meniscus (*green arrow*)
- **Dg.:** Folyadék a suprapatellaris bursában, radiális meniscus szakadás / Effusion in the suprapatellar bursa, radial meniscus tear

# T1 coronal



# T2 sagittal

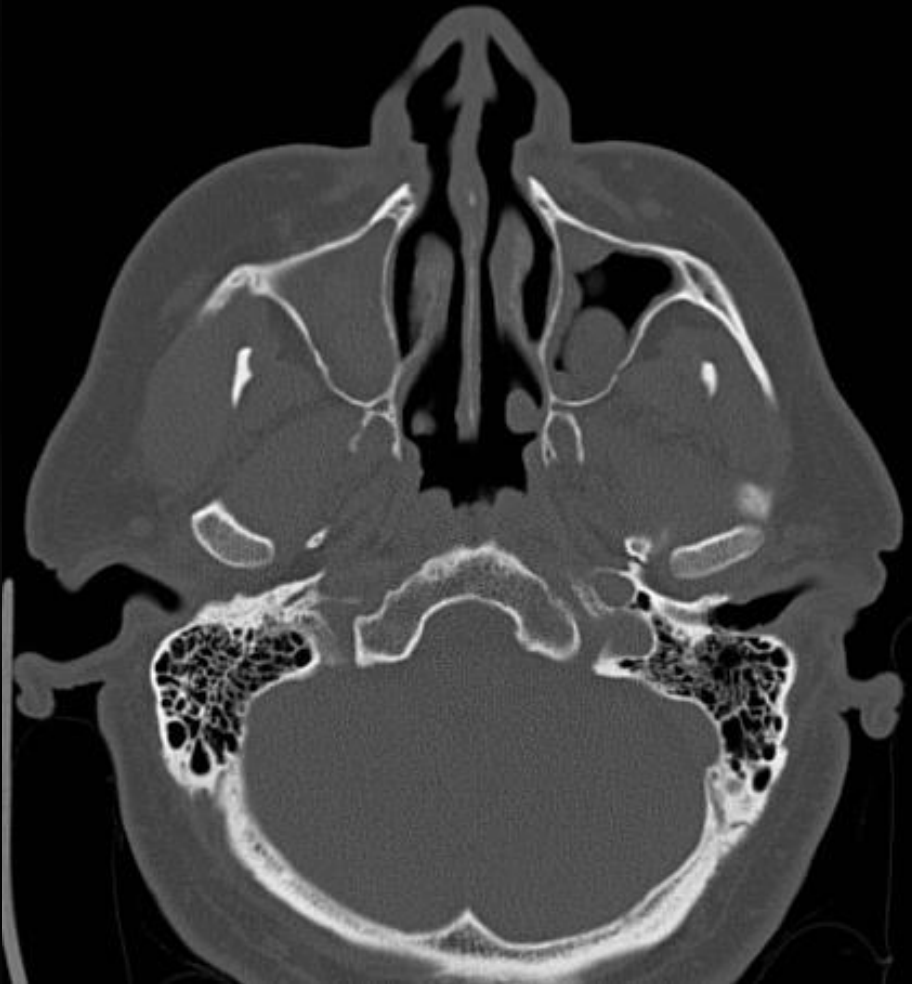


46.

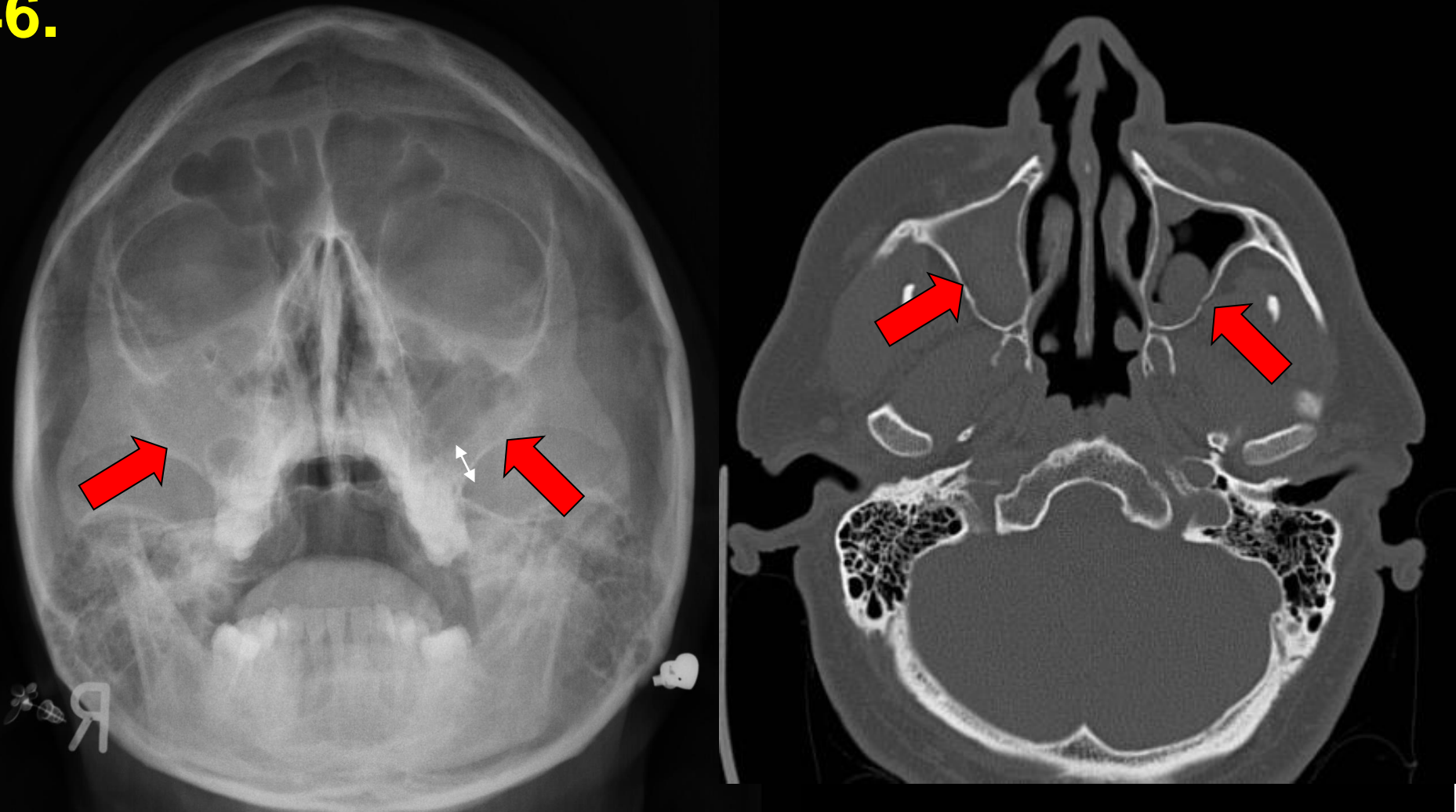


R

(R)



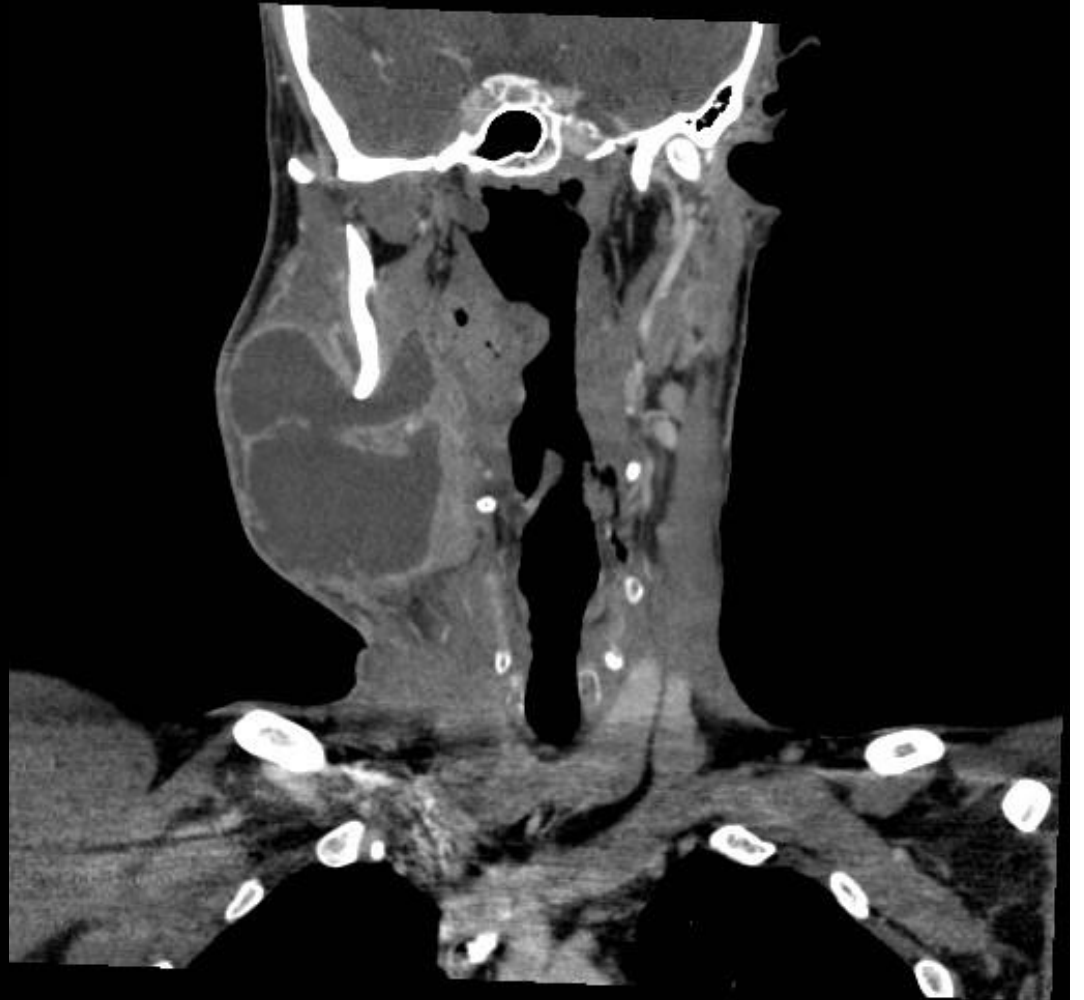
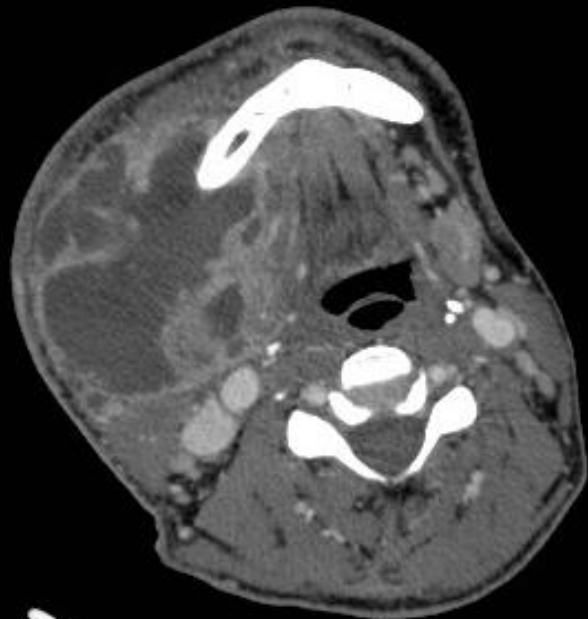
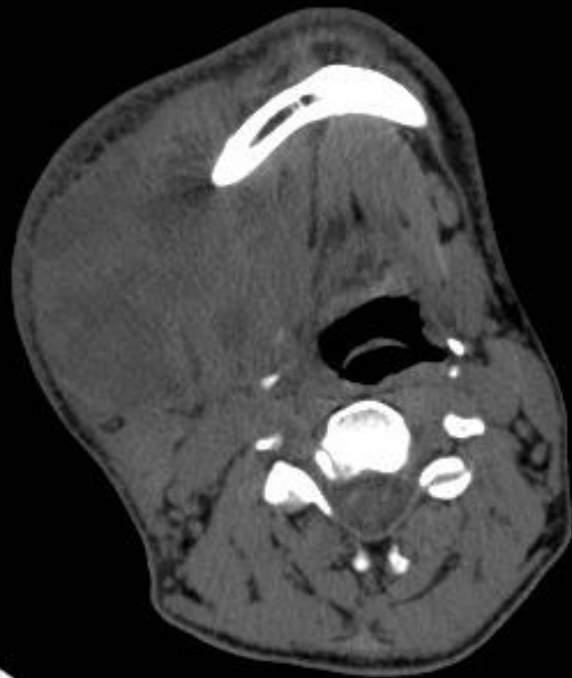
46.



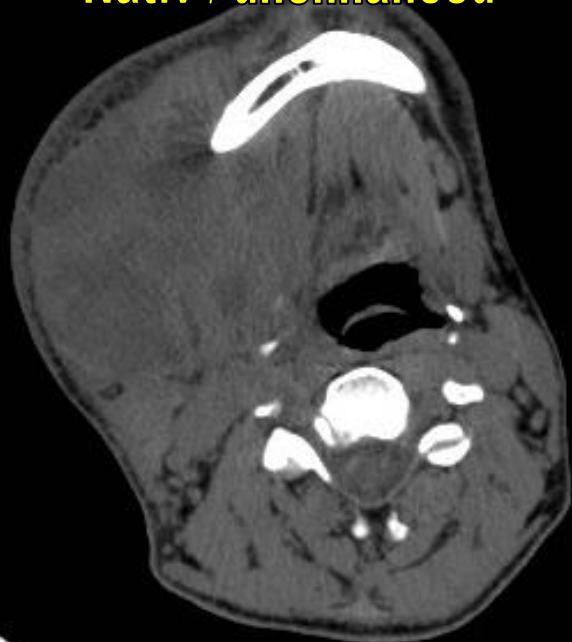
- Bal kép: Orrmelléküreg felvétel, jobb kép: os temporale HRCT / Left image: X-ray of the sinuses, right image: temporal bone HRCT
- Jobb sinus maxillaris homogéneen fedett, bal oldaliban körkörös nyálkahártya megvastagodás van (nyíl) / Right maxillary sinus has homogenous decreased transparency, left one has rounded mucous thickening (arrow)
- Dg.: Sinusitis l.u. (jobb oldali teljesen fedett, bal oldali krónikus polypoid gyulladást mutat) / Diagnosis: Bilateral sinusitis (right sided completely inflamed, left one has chronic polypoid mucous thickening)



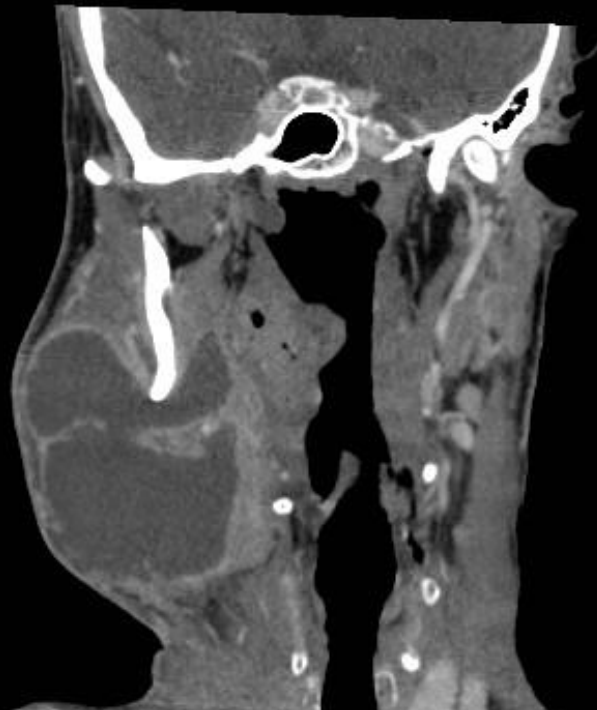
47.



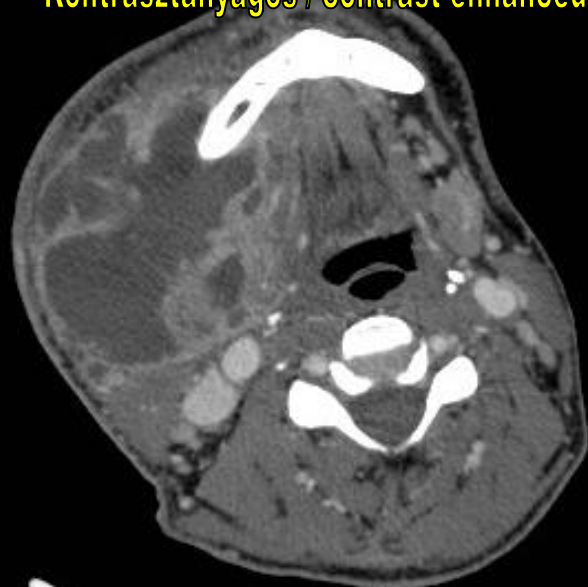
# 47. Natív / unenhanced



# Kontrasztanyag / contrast enhanced

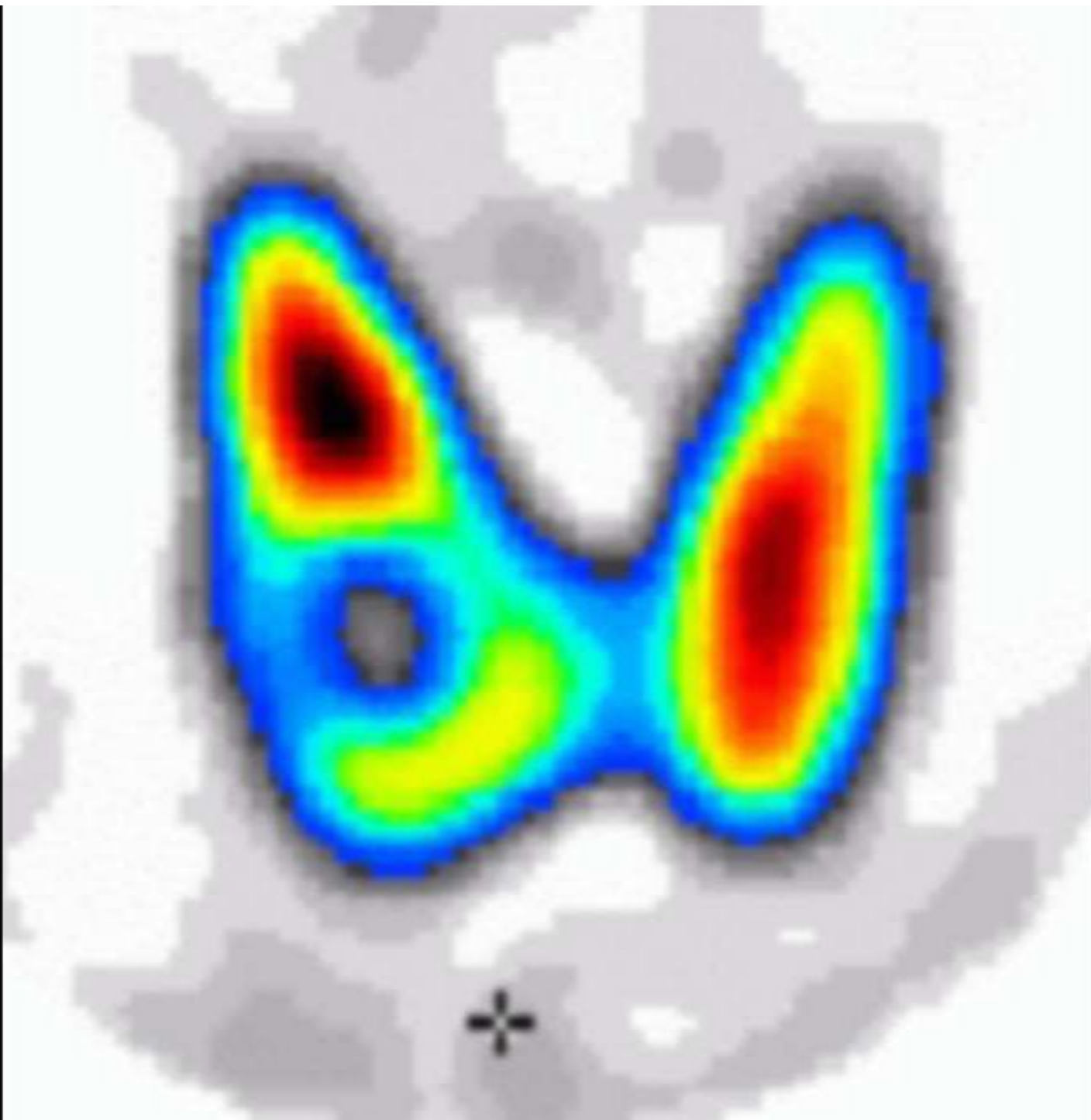


# Kontrasztanyag / contrast enhanced



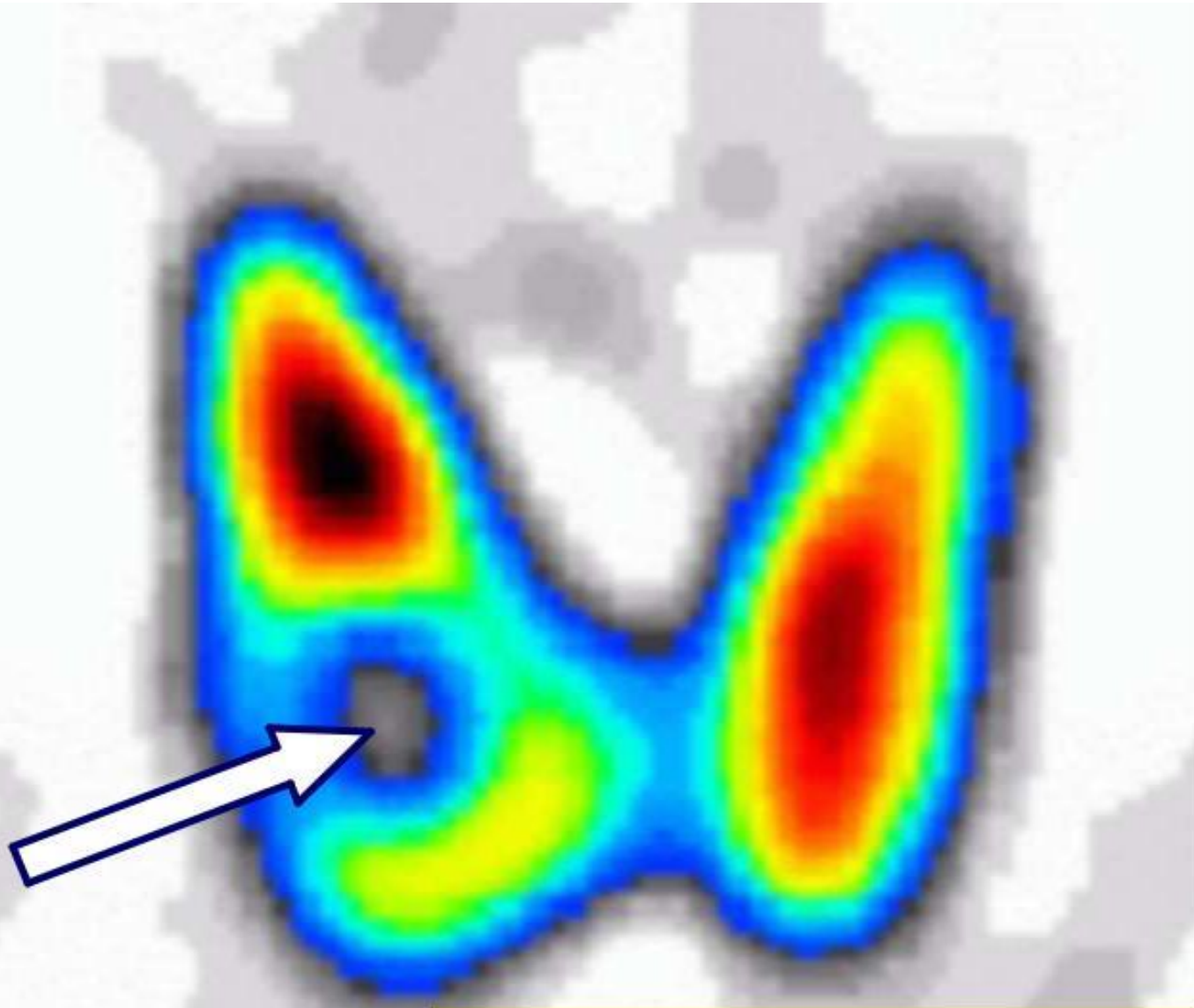
- Natív (bal felső) és kontrasztos (bal alsó és jobb o.) fej-nyaki CT / Unenhanced (left upper) and contrast-enhanced (left lower and right images) head-and-neck CT
- Nyaki lágyrész-kiszéledés a jobb oldalon submandibularisan / Soft tissue mass on the right side of the neck (submandibular region)
- Gyűrűs, szeptált kontraszthalmozás centrális hypodenzitással / Ring-like septated enhancement with central hypodensities
- **Dg.: Nyaki abscessus / Diagnosis: Abscess on the neck**

48.





48.



- Pajzsmirigyszcintigram / Thyroid gland scintigram
- Megnagyobbodott jobb lebeny / Right lobe enlargement
- **Dg.: Aktivitáskiesés a jobb lebeny közepén: hideg göb /**  
**Diagnosis: Loss of activity in the centre of the right lobe:**  
**cold nodule**

49.

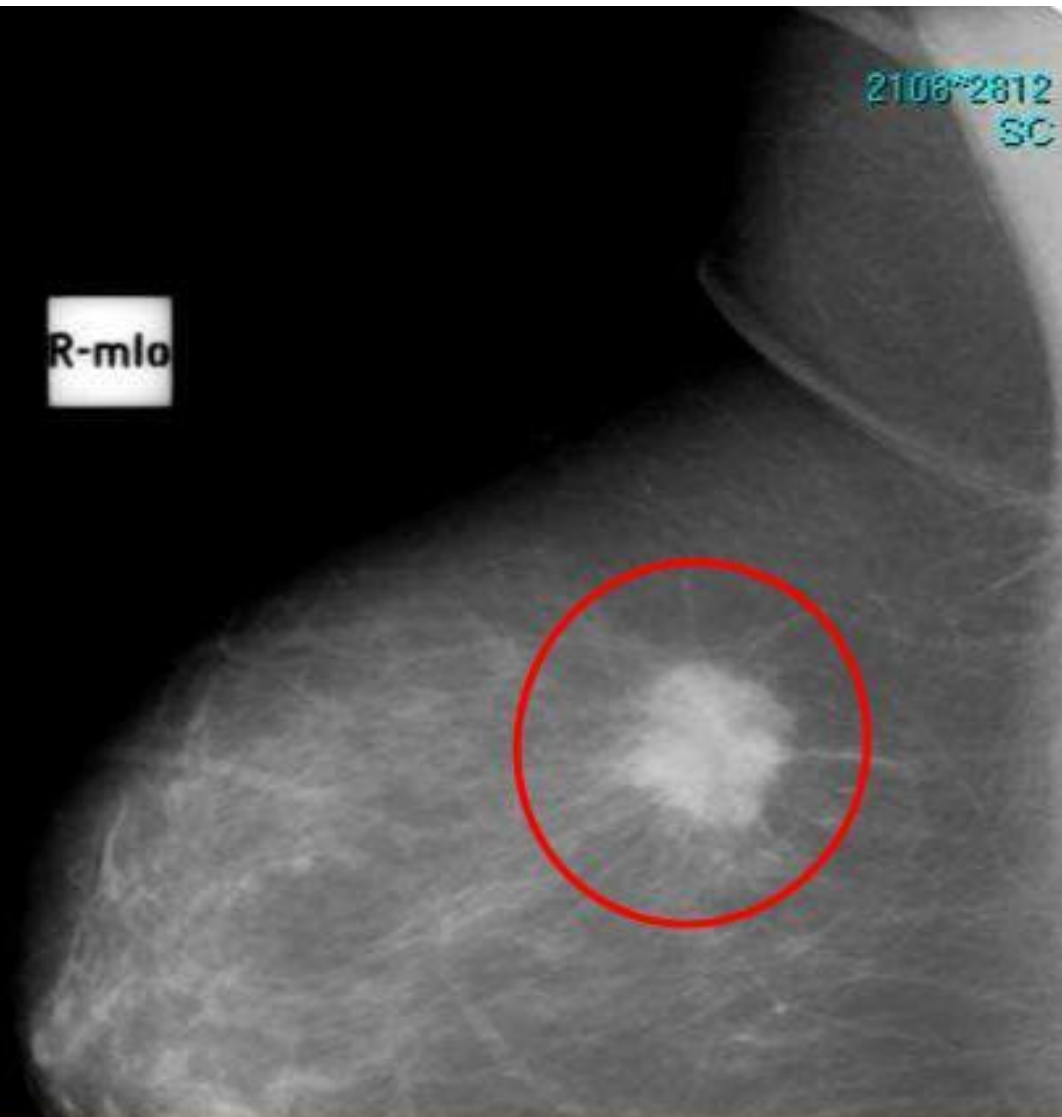
2108-2812  
SC

R-mlo



5/6

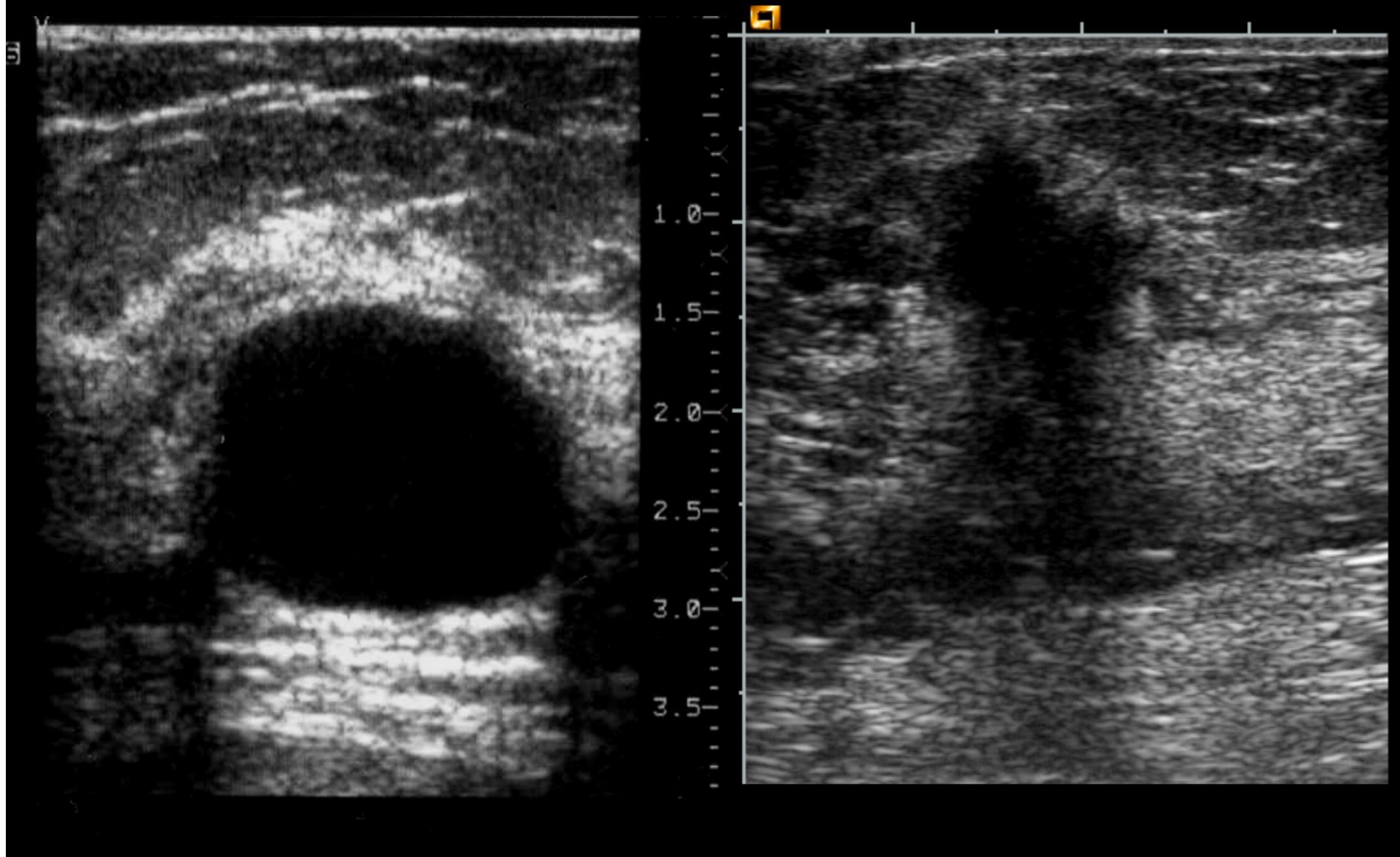
49.



- Mammográfia, jobb emlő, ferde felvétel / Mammography of right breast, oblique view
- Lágysugár-technika (30 keV) / Soft-beam technique (30 keV)
- Spikulált lágyrészárnyék / Soft tissue mass with spiculated contour
- **Dg.: Emlő carcinoma / Diagnosis: Breast cancer**



50.

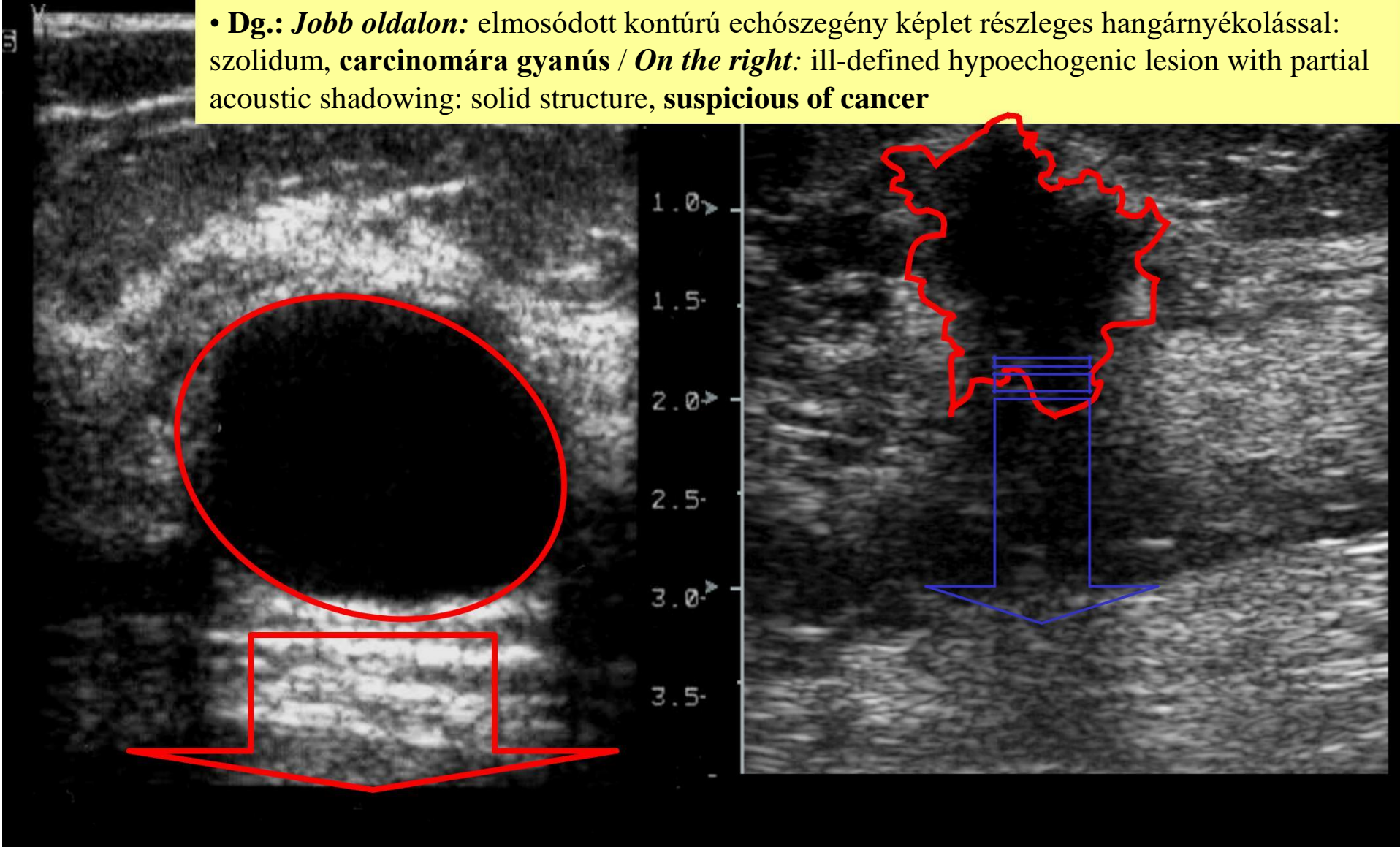


50.

• Emlő ultrahang lineáris fejjel (7,5–10 MHz; max. 4 cm-es vizsgálati mélység) /  
Breast sonography with linear probe (7.5–10 MHz; imaging depth of 4 cm maximum)

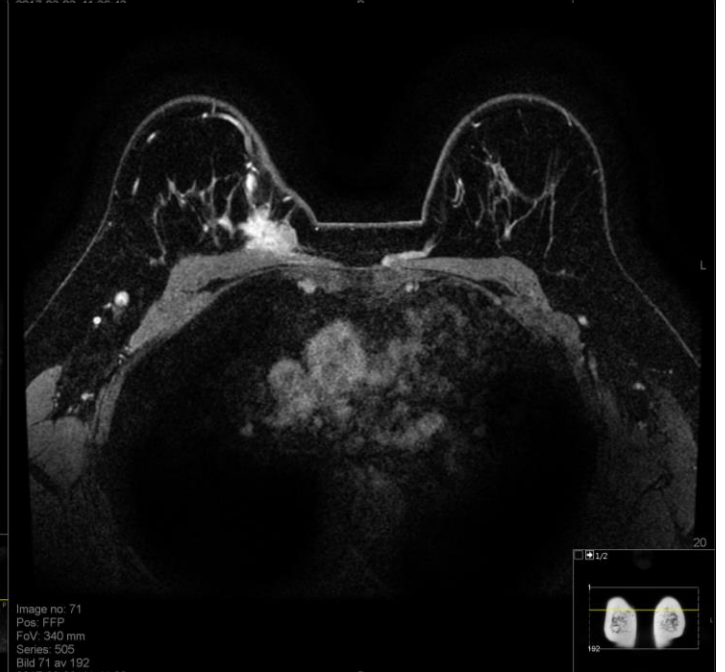
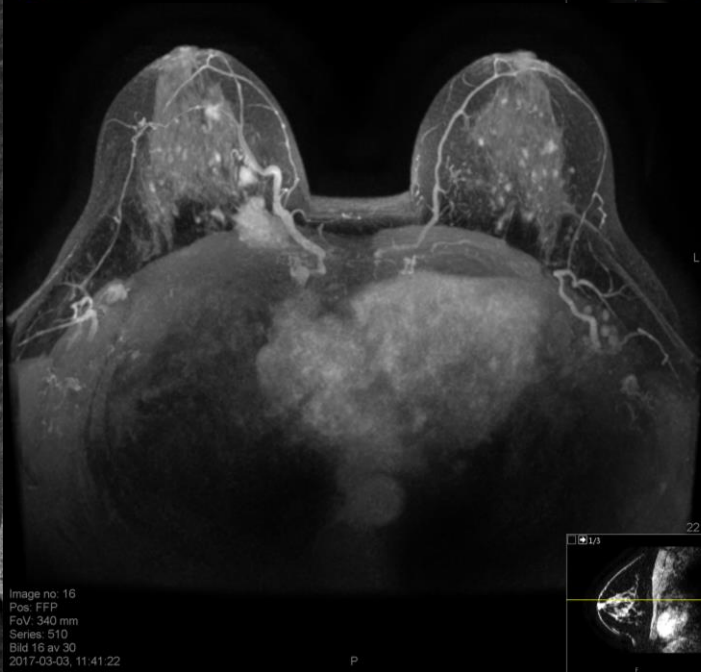
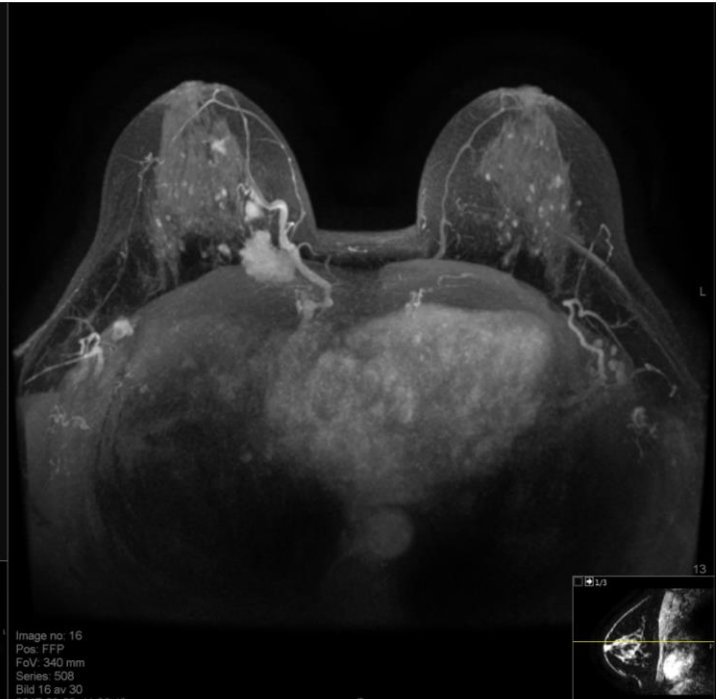
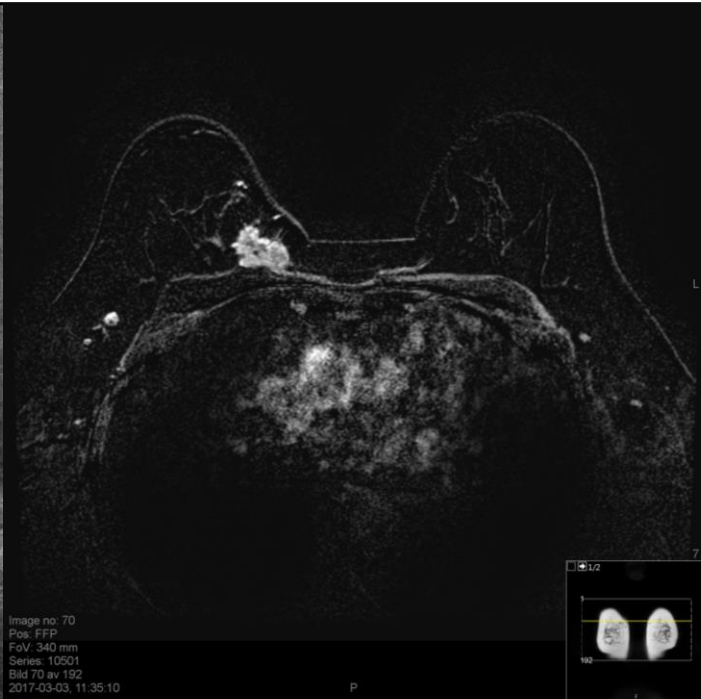
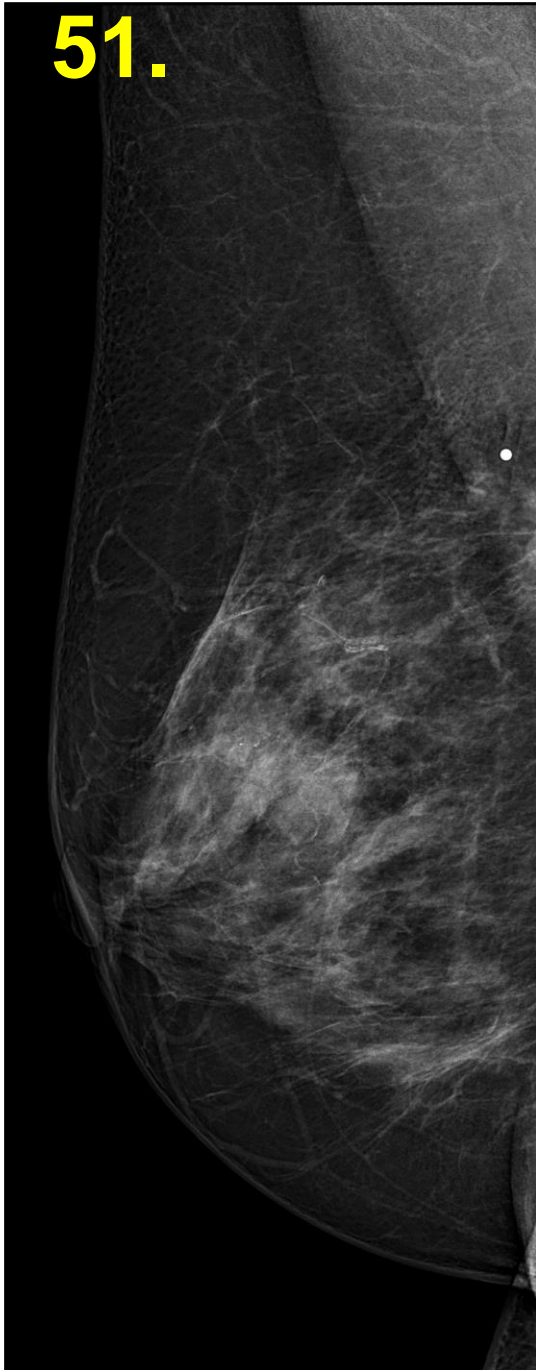
• **Dg.:** *Bal oldalon:* echómentes, jól körülírt képlet mögöttes hangerősítéssel = **cysta** /  
*On the left:* well-defined anechoic lesion with acoustic enhancement behind = **cyst**

• **Dg.:** *Jobb oldalon:* elmosódott kontúrú echószegény képlet részleges hangárnyékolással:  
szolidum, **carcinomára gyanús** / *On the right:* ill-defined hypoechogenic lesion with partial  
acoustic shadowing: solid structure, **suspicious of cancer**



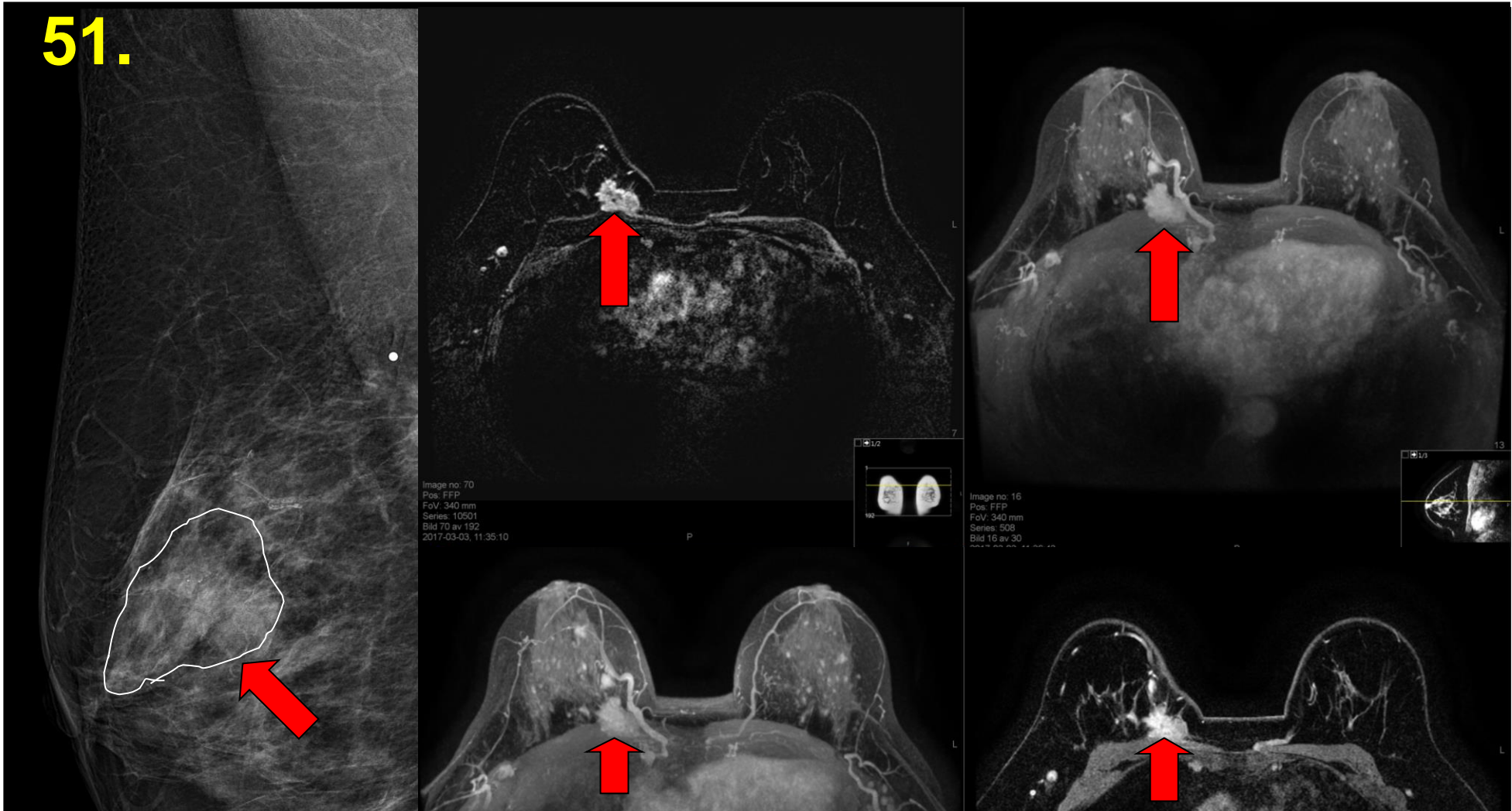


51.





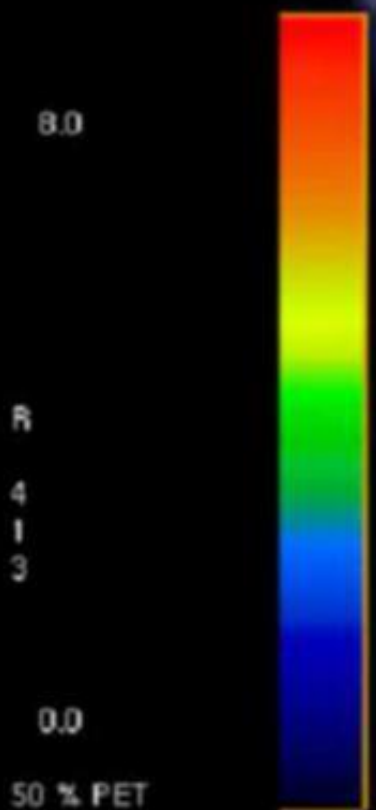
51.



- Bal o.: Mammográfia, félferde felvétel. Jobb o.: Kontrasztanyagossal erősítő MR / Left image: mammography, RLM image. Right: Breast MRI, contrast enhanced images
- Mammográfián elmosott kontúrú, mikronmeszesedéseket tartalmazó laesio. MR: Intenzíven halmozó góc a jobb emlőben / Mammography: Inhomogen mass in the right breast with microcalcifications. Contrast enhancing lesion in the right breast
- Dg.: Jobb oldali expansív emlőtumor / Right sided expansive breast cancer

52.

Coronal3 Volume 2/Volume 1  
A: 16.4  
DFOV 82.6cm



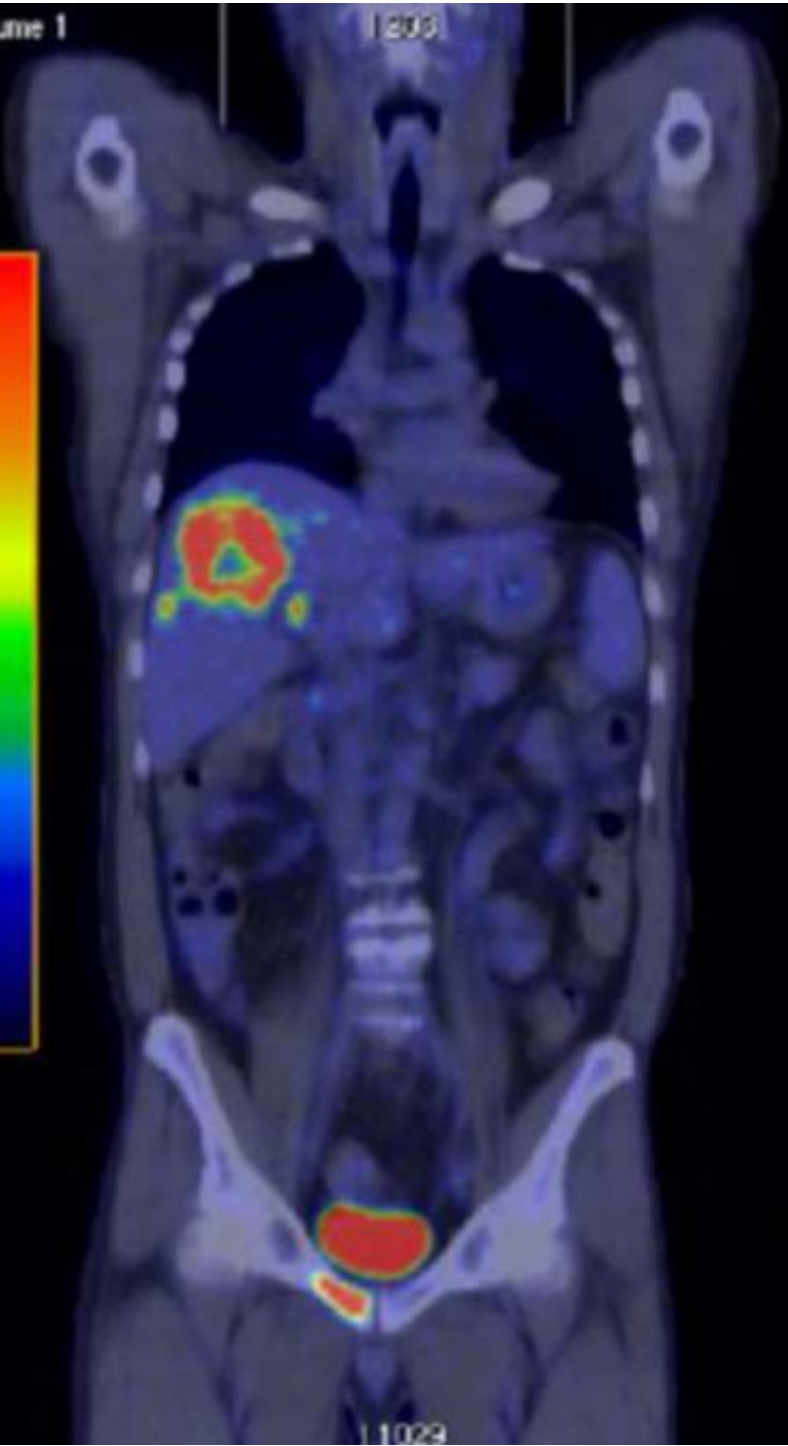
R  
4  
1  
3

L  
4  
1  
3

0.0  
50 % PET

14.1/Average

m=0.0 M=8.0 g/ml



V=6.88

52.

Coronal3 Volume 2/Volume 1  
A: 16.4  
DFOV 82.6cm

8.0

R

4

1

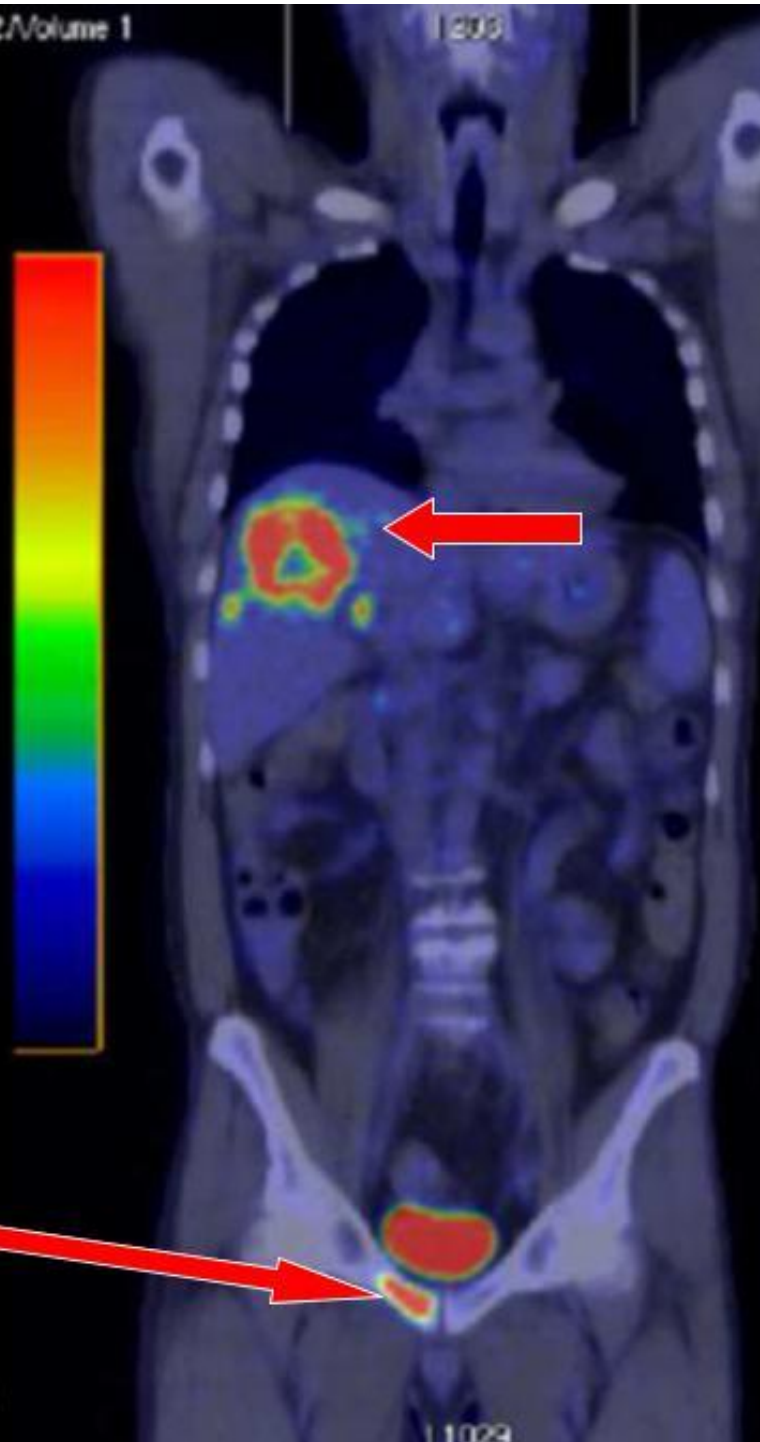
3

0.0

50 % PET

14.1/Average

m=0.0 M=8.0 g/ml



- PET-CT (hidrid képalkotás) / PET-CT (hybrid imaging method)

- CT: jó morfológia + PET: metabolikus információ (glükózfelvétel mértéke) / CT: detailed morphology + PET: metabolic information (glucose uptake rate)

- Fokozott fluoro-dezoxi-glukóz- ( $^{18}\text{F}$ -FDG-) felvétel a májban és a jobb os pubisban / Increased fluorodeoxyglucose ( $^{18}\text{F}$ -FDG) uptake in liver and pubic bone

- Szabályos kiválasztás a húgyhólyagban / Normal excretion in urinary bladder

- **Dg.: Áttétek / Metastases**

V=6.88

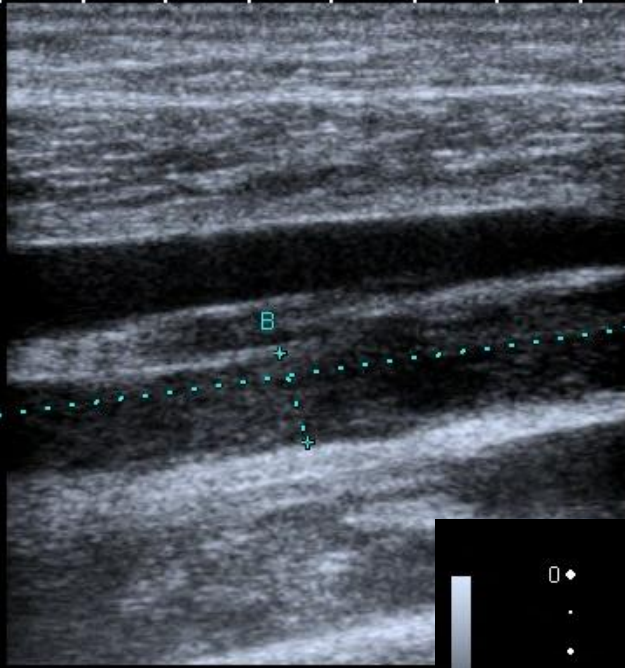
11023



53.

APure

T



2DG  
84  
DR  
60

11L5  
T8.4

33 fps

- 0 ◆
- 1 ◆
- 2 ◆
- 3 ◆
- 4 ◆

Dist A 48.7 mm    Dist B 5.6 mm



T



2DG  
84  
DR  
60

11L5  
T8.4

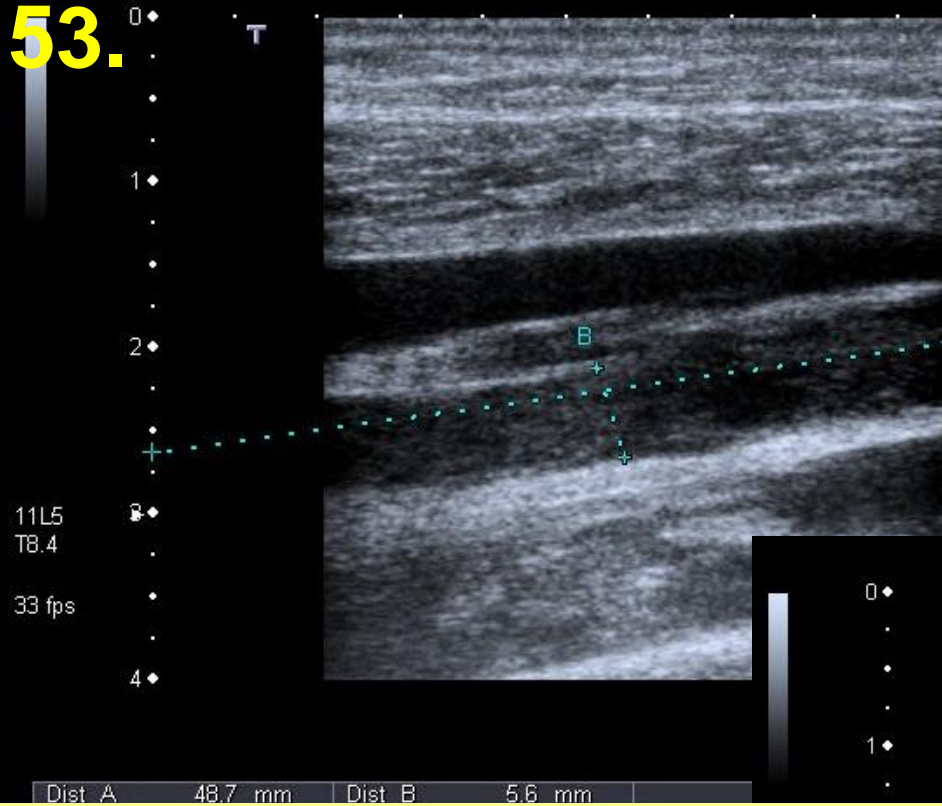
33 fps

- 0 ◆
- 1 ◆
- 2 ◆
- 3 ◆
- 4 ◆

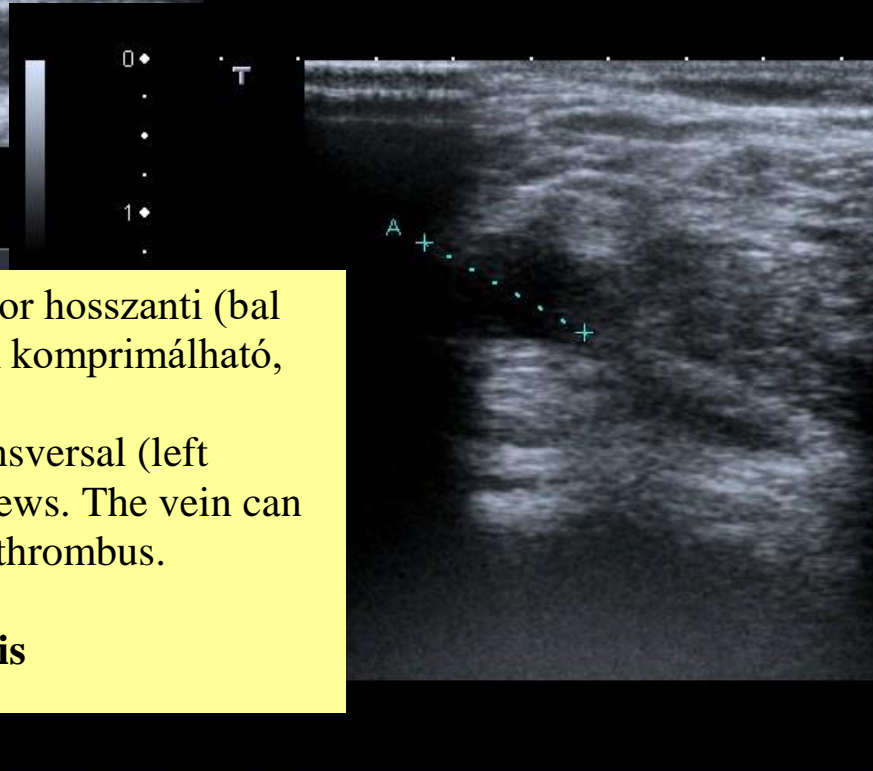
Dist A 11.8 mm



53.



2DG  
84  
DR  
60



2DG  
84  
DR  
60

• B-módú ultrahang képek, v. tibialis anterior hosszanti (bal o.) és keresztmetszeti (jobb o.) síkban, nem komprimálható, lument echoszegény thrombus tölti ki. /

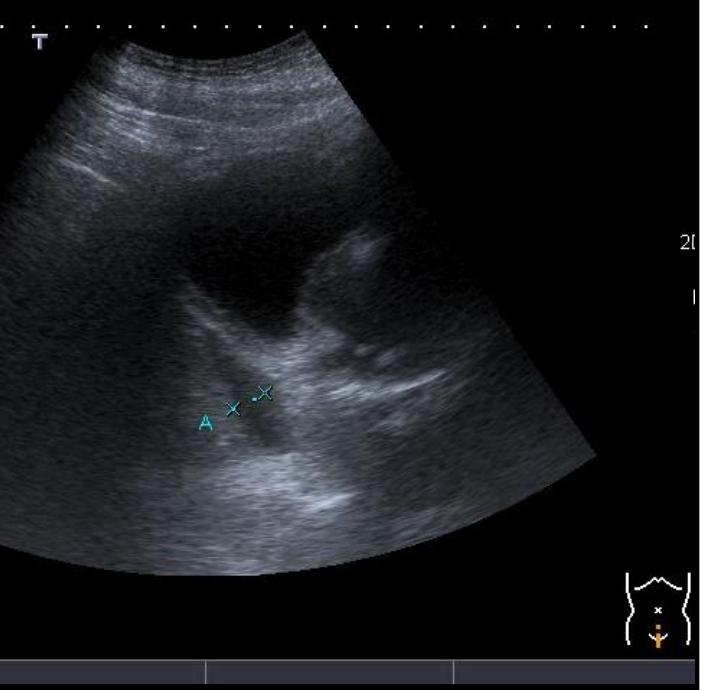
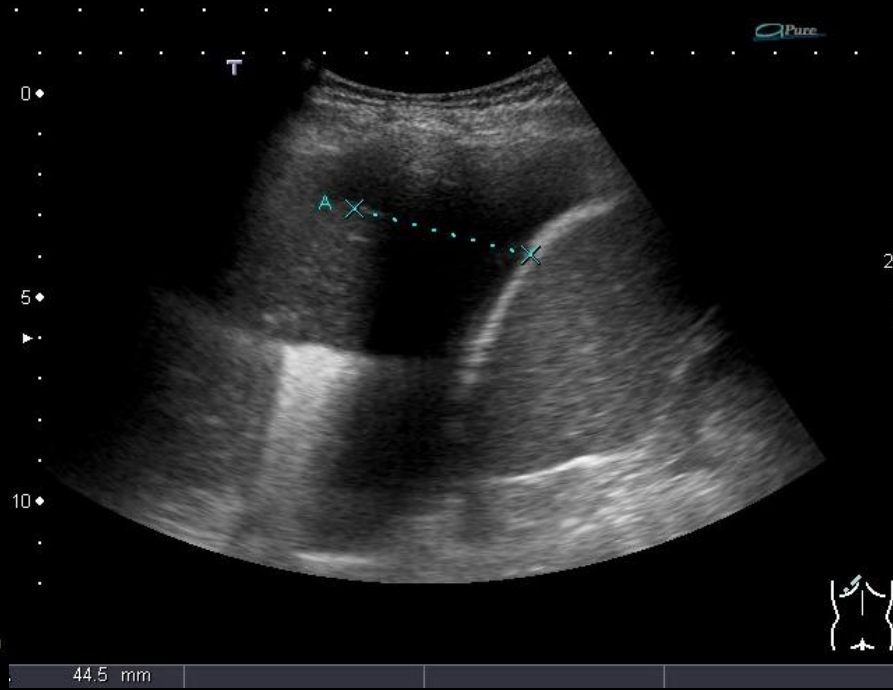
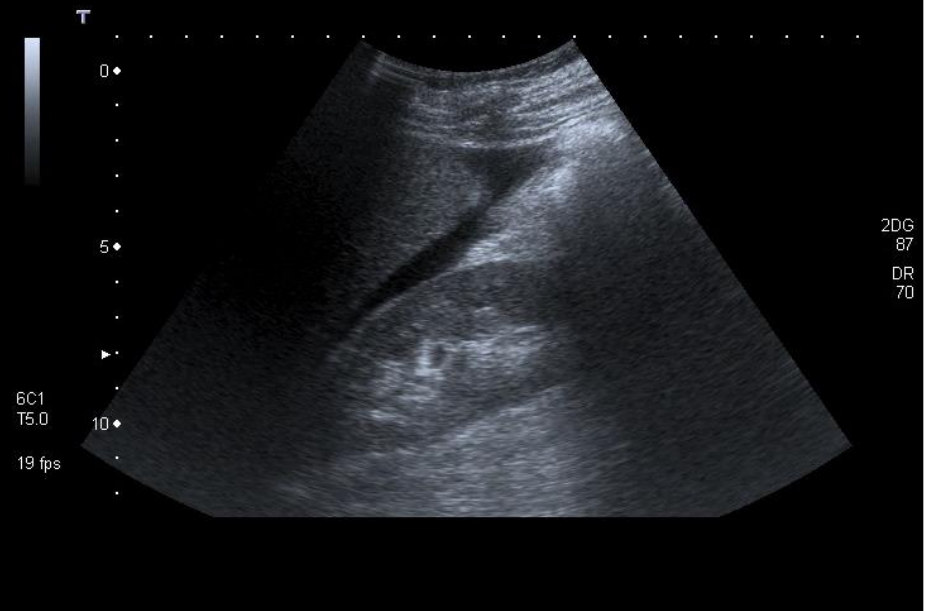
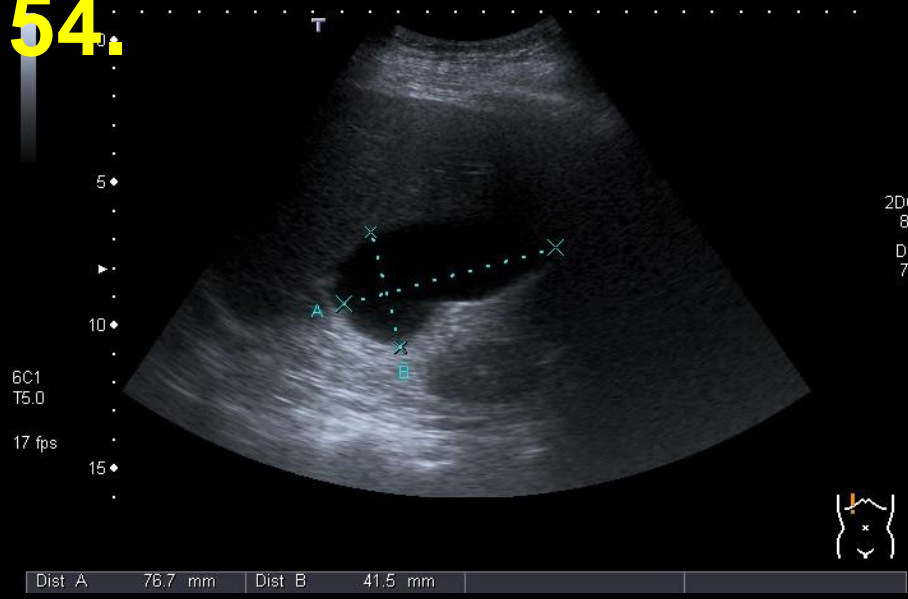
B-mode US images, anterior tibial vein transversal (left image) and cross-sectional (right image) views. The vein can not be compressed, filled with hypoechoic thrombus.

• **Dg.: V. tibialis anterior thrombosis /**  
**Diagnosis: Anterior tibial vein thrombosis**

Dist A 11.8 mm

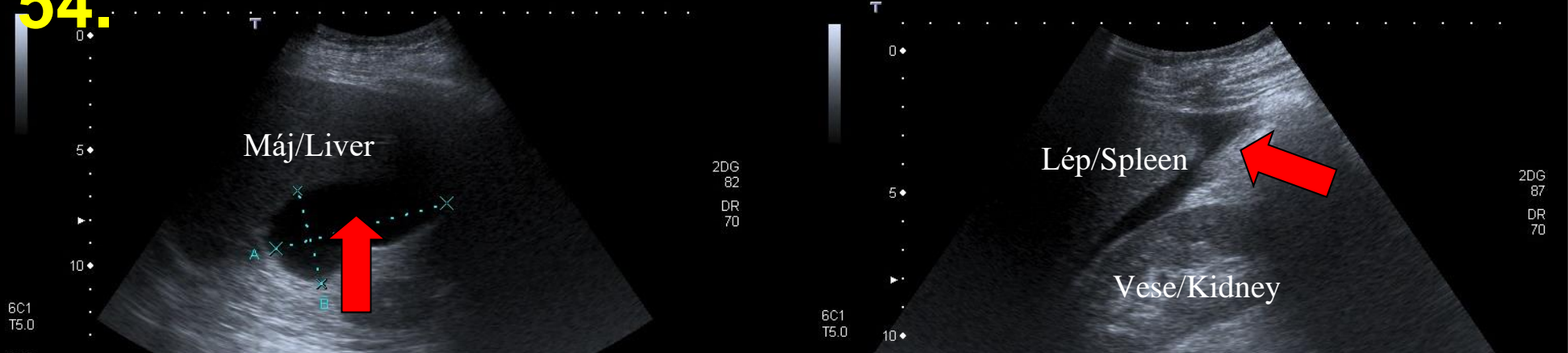


54.

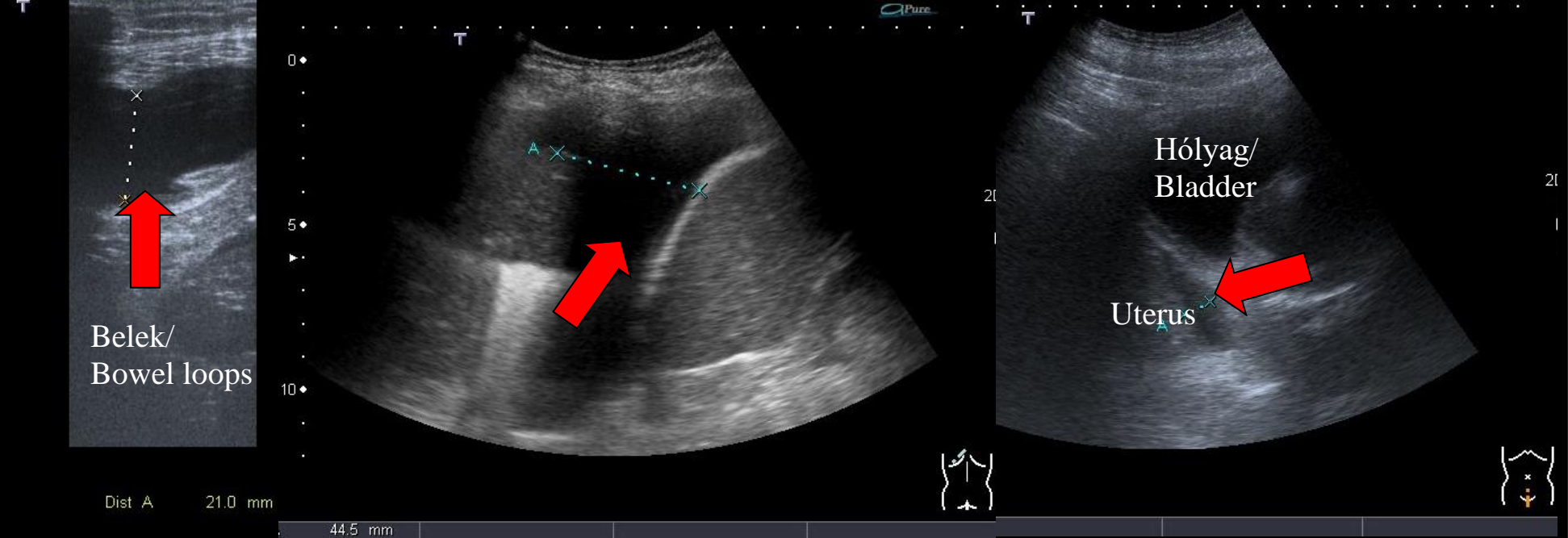




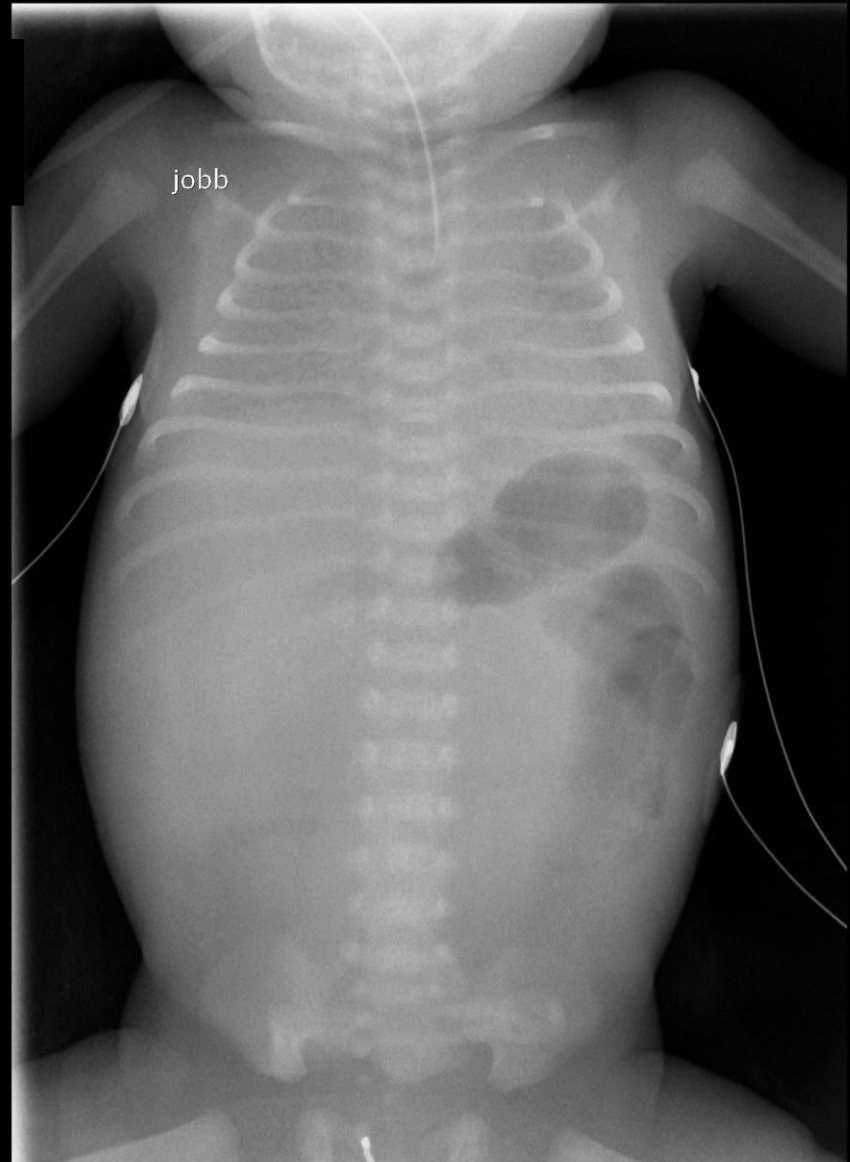
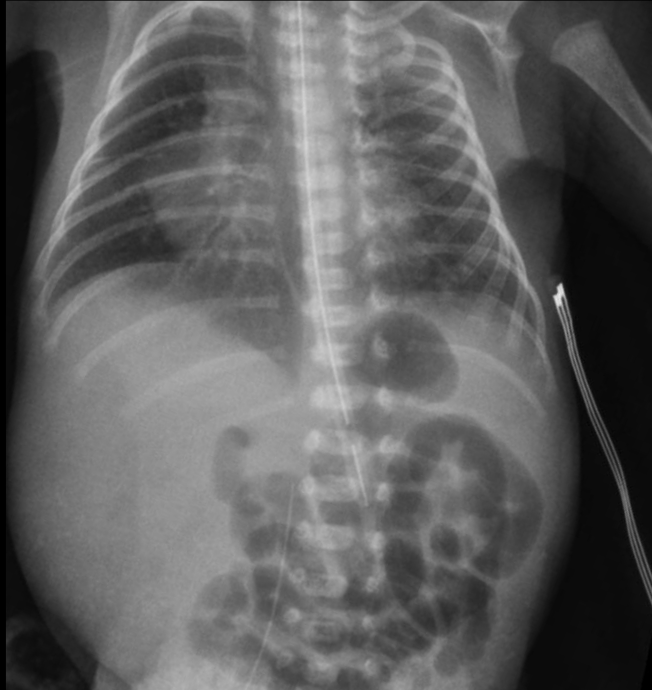
54.



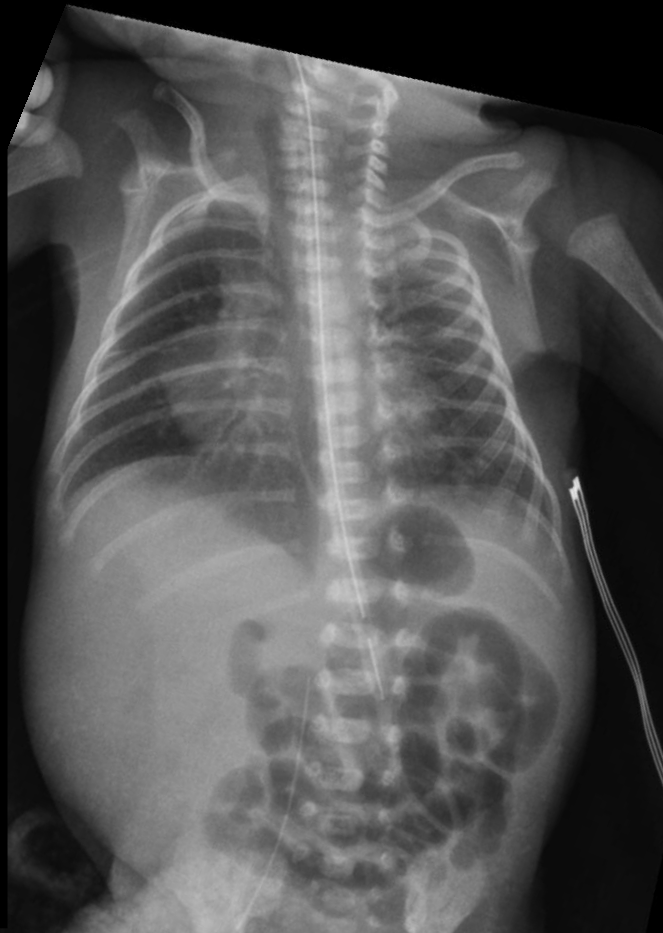
- B-módú ultrahang képek – FAST ultrahang / B-mode US images – FAST US
- Szabad hasi folyadék a fossa hepatorenalisban, lép körül belek között és a Douglasban / Free abdominal fluid in the hepatorenal fossa, around the spleen, among the bowel loops and in Douglas pouch
- **Dg.: Szabad hasi folyadék / Free abdominal fluid**



55.



55.



- Babygram felvétel / Chest X-Ray images
- Bal o.: Normális tüdő. Jobb o.: fehér tüdő aerobronchogramokkal, a szív kontúrjai elmosottak, teljes transparenncia csökkenés látható (IV. stádium) / Left image: healthy lung, right image: „white lung”, wide air-bronchograms running to the peripheries. The contours of the heart blurred, complete loss of transparency is visible (stage IV).
- **Dg.: Fehér tüdő. IRDS / Diagnosis: IRDS (Idiopathic respiratory distress syndrome).**



