2012年8月24日
中華民國放射線醫學會
住院醫師閱片測驗-答案

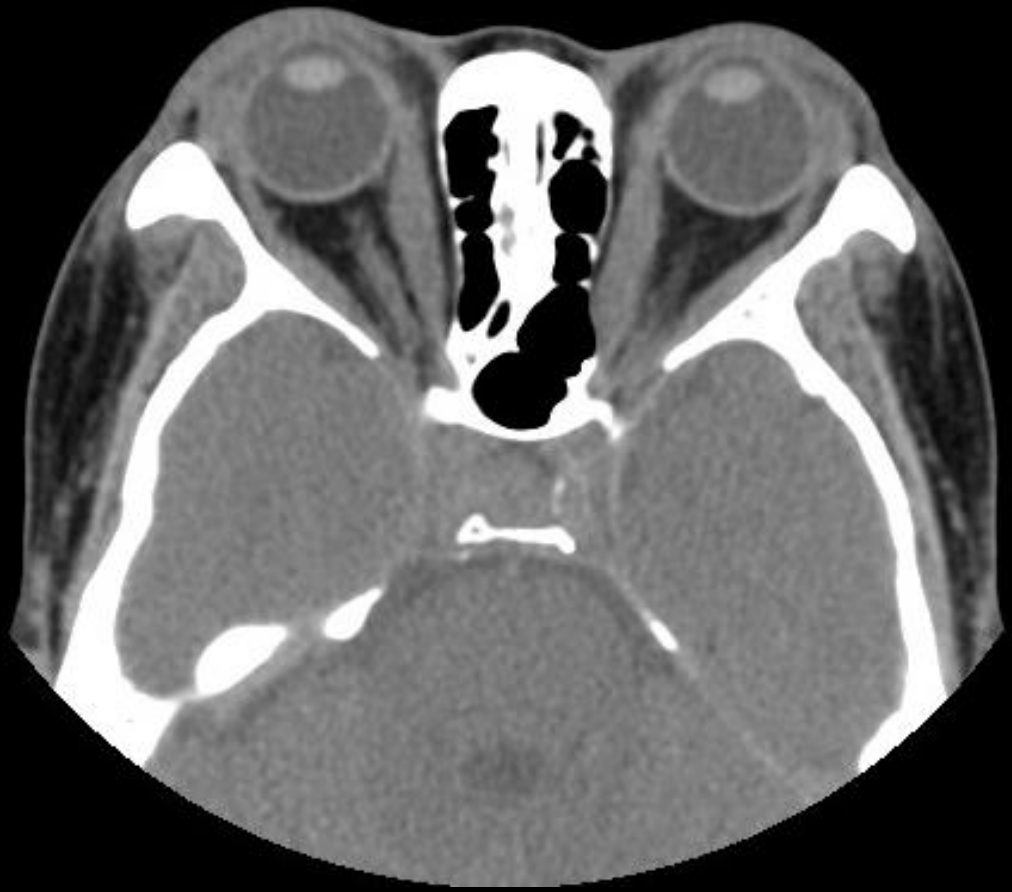
出題醫院

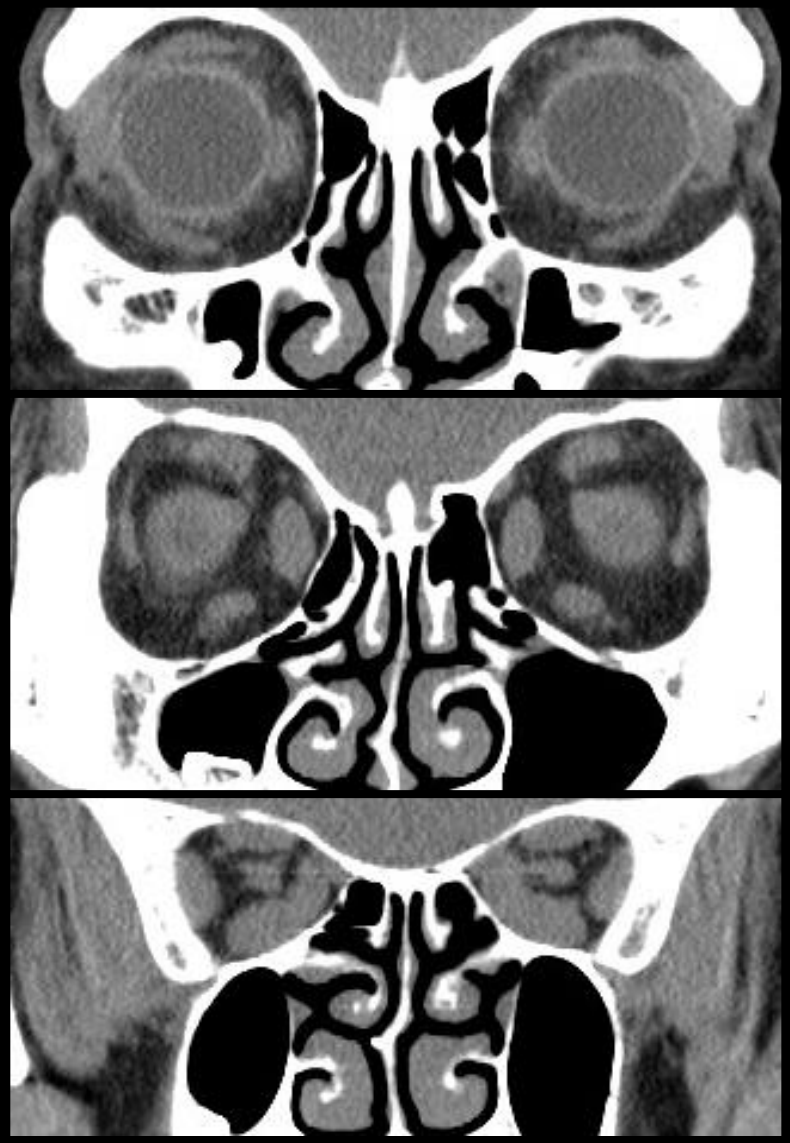
中國醫藥大學附設醫院放射線部

NR

Q01

45/F Eyelid puffy and proptosis, Borderline IOP:21 mmHg

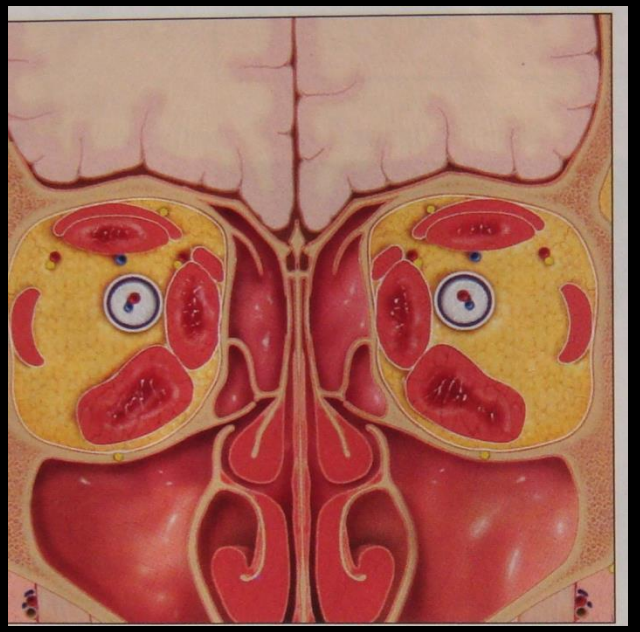


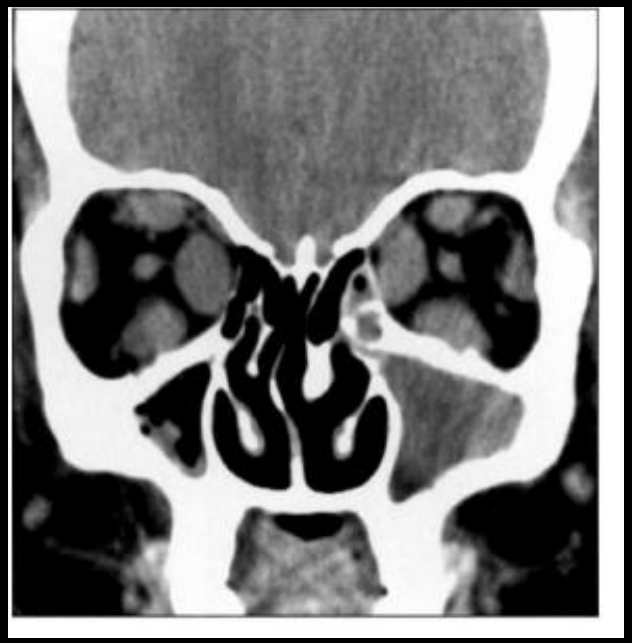


A01

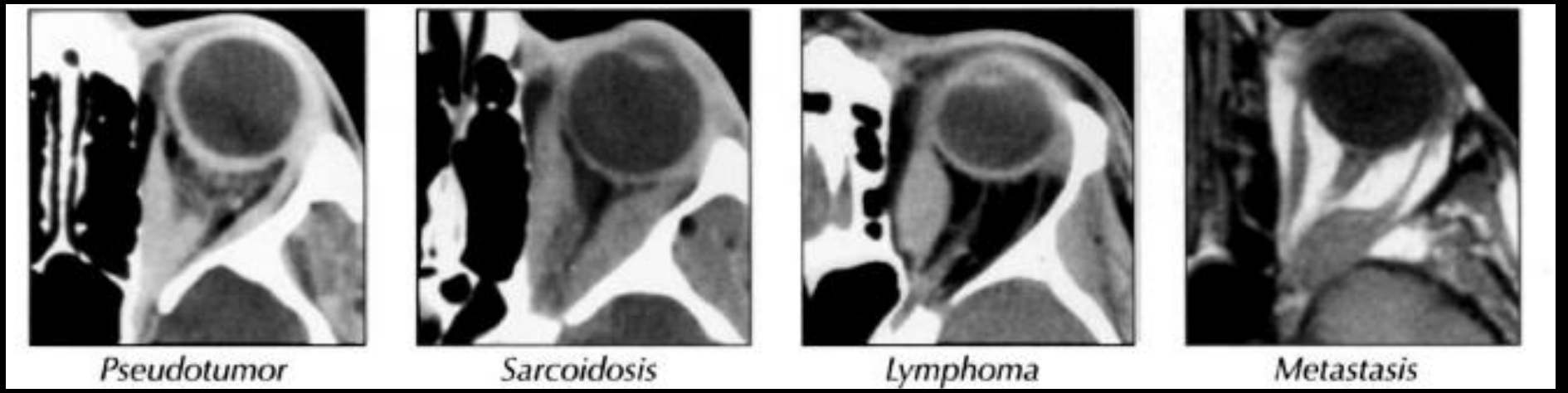
ANS：Thyroid associated orbitopathy, both eyes

- Most common cause of proptosis in adults
- Most frequently associated with Graves disease.
- More frequently in women.
- Characterised by enlargement of the extraocular muscles (EOMs)
- Typical:
  - Sparing of tendon (although it can be involved in acute cases)
  - Bilateral(76-90%)
  - Symmetric (70%)
- Sites of predilection: mnemonic “"I'M SLOW"
  - Inferior > medial > superior> lateral> oblique





DDx: **Extra-Ocular Muscle Enlargement**



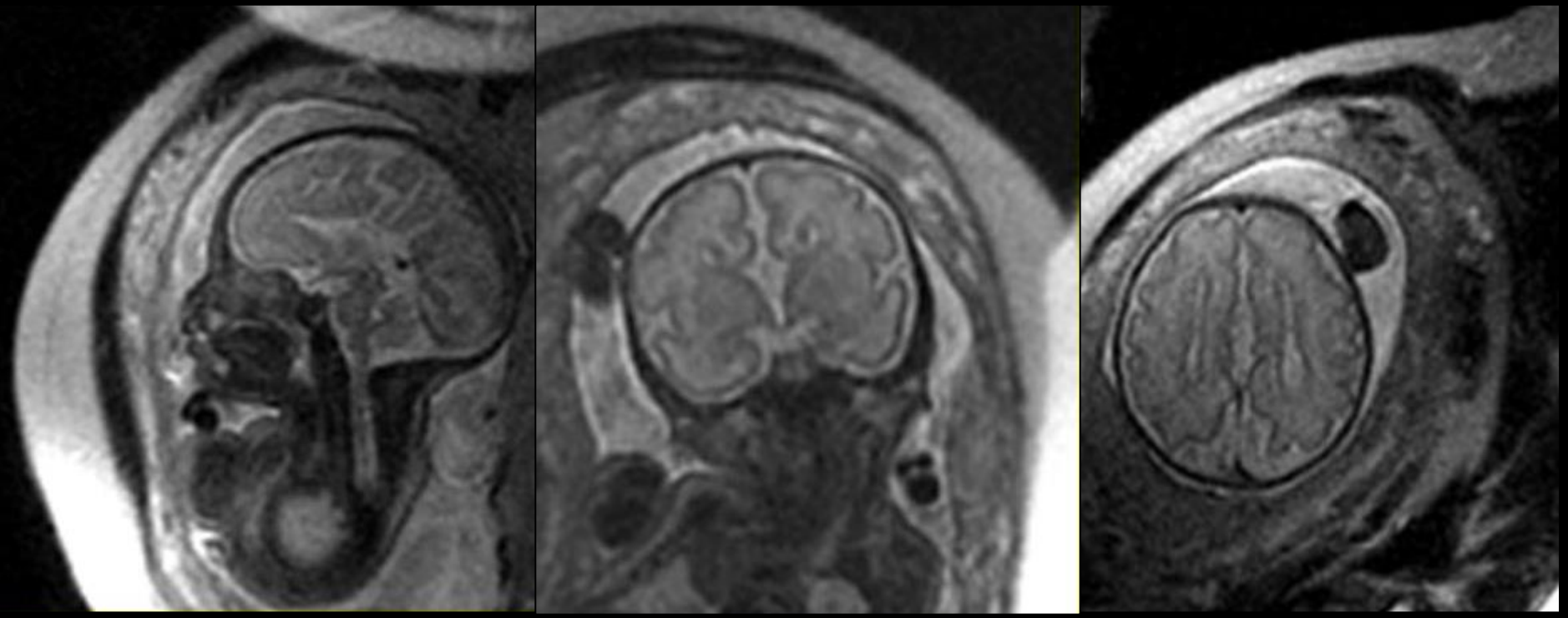
- **Idiopathic orbital pseudotumor**
  - Diffuse inflammatory changes with painful proptosis
  - Typically unilateral; equal distribution among EOMs

- **Infectious cellulitis-myositis**
  - Orbital cellulitis with medial rectus enlargement
  - Associated with sinonasal infection (ethmoids)
- **Sarcoidosis**
  - Granulomatous inflammatory process of orbit with varied manifestations involving multiple areas
  - Seen in 20% of patients with systemic sarcoid
- **Lymphoproliferative lesion**
  - Usually non-Hodgkin lymphoma (NHL)
  - Pliable mass may originate from or infiltrate EOM
  - Primary to orbit or associated with systemic disease
- **Metastasis**
  - Breast primary in 42%; lung primary in 11%
  - Melanoma primary in 5%, high predilection for EOM
  - EOM location less common than fat or bone

Q02

Fetus

孕婦懐孕27週



A02

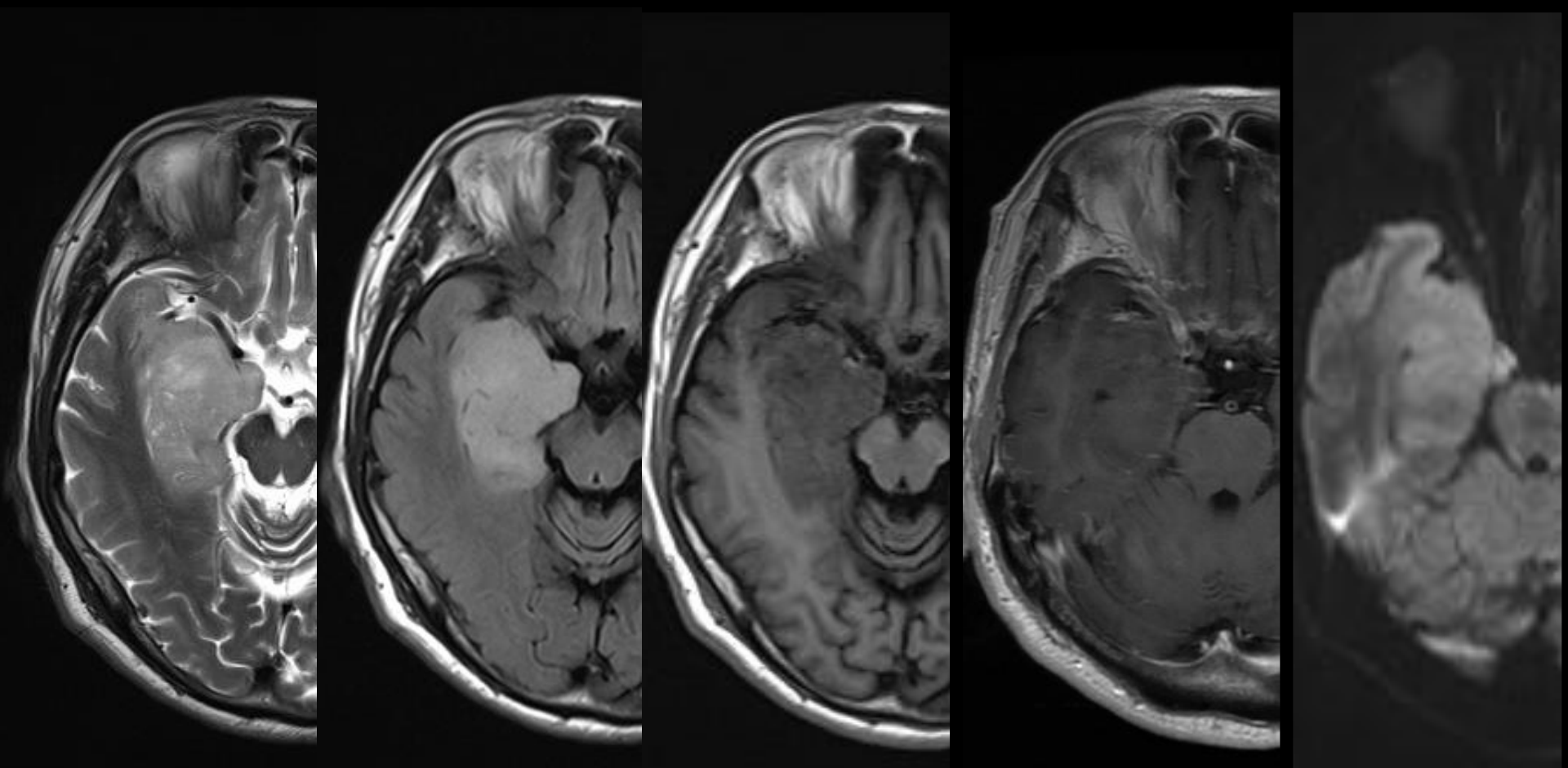
ANS：Agenesis of corpus callosum

Q03

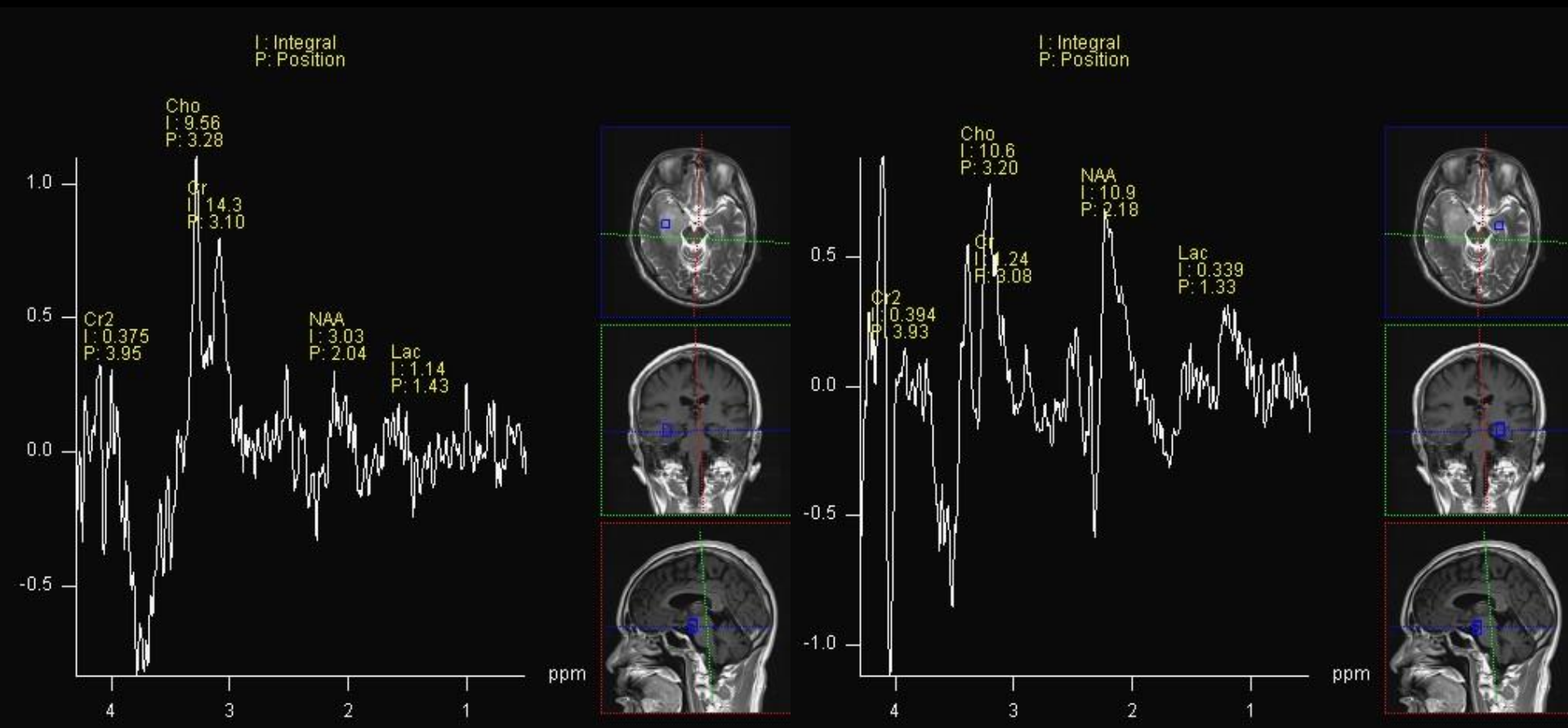
61/M, Hx of NPC s/p CCRT,

C.C: sudden onset of temporary conscious change

本題有兩張投影片，第一張



本題有兩張投影片，第二張

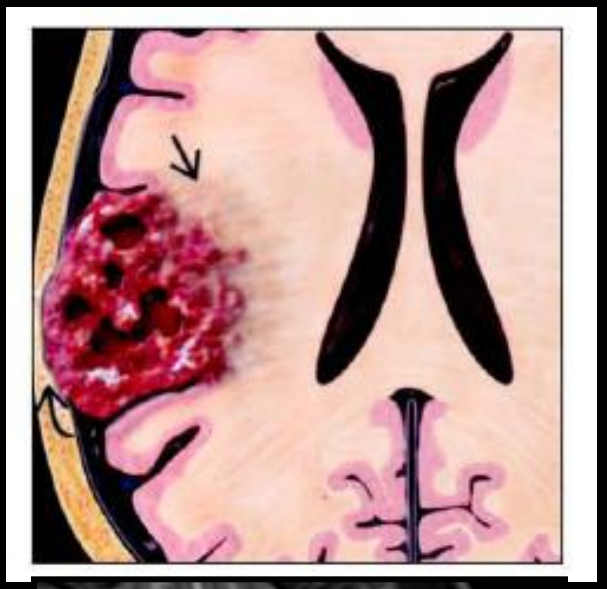


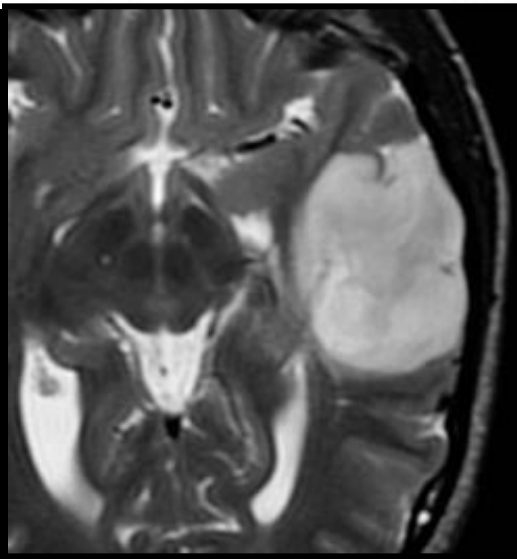
A03

ANS：Oligodendroglioma

Oligodendroglioma

- 10-15% of all gliomas
- WHO II
- Longstanding seizure
- Partially Ca++ subcortical/cortical mass in **middle-aged** adult
  - Peak incidence 4th and 5th decades
- Majority supratentorial (85%), most common site is frontal lobe; may involve temporal, parietal or occipital lobes
  - 70 - 90% calcificaiton, 20% cysitc
  - T2WI / FLAIR: hyperintense
  - 50% Heterogeneous enhancement
  - DWI: No diffusion restriction is typical
  - MRS: Elevated Cho, decreased NAA



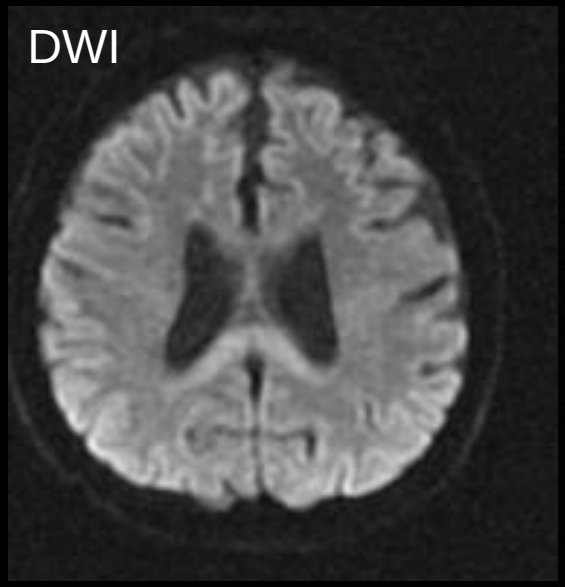


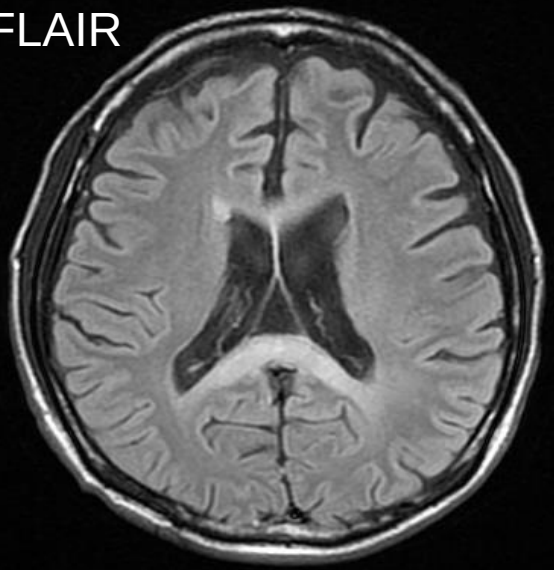
DDx:

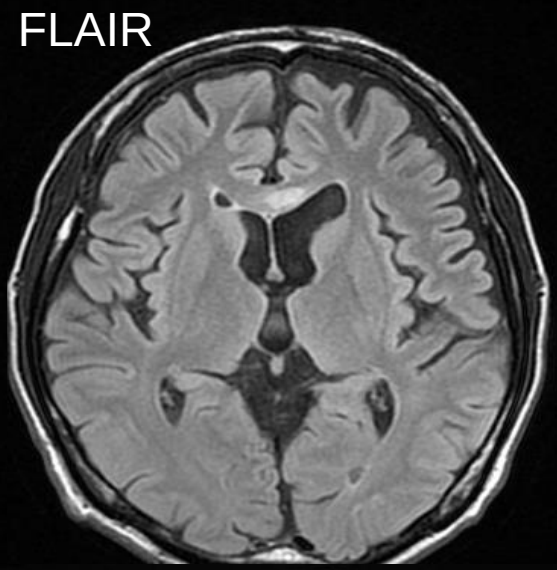
1. Cortically-based tumor
    1. Oligodendroglioma
    2. DNET: Well-demarcated, wedge-shaped bubbly intracortical mass in young patient
    3. Ganglioglioma: partially cystic, enhancing, cortically based mass in child/young adult with with temporal lobe epilepsy
    4. PXA: Children/ young adults, Cyst and mural nodule typical
    5. Astrocytoma: Usually involve white matter, cortex relatively spared
2. Metastasis from NPC
    - Rare, typically multiple lesions at gray-white junction
    - More frequency direct intracranial invasion
3. Radiation Necrosis.
    - Oligodendrocytes and white matter damage
    - White matter high signal
    - Typically low choline, creatine, and NAA

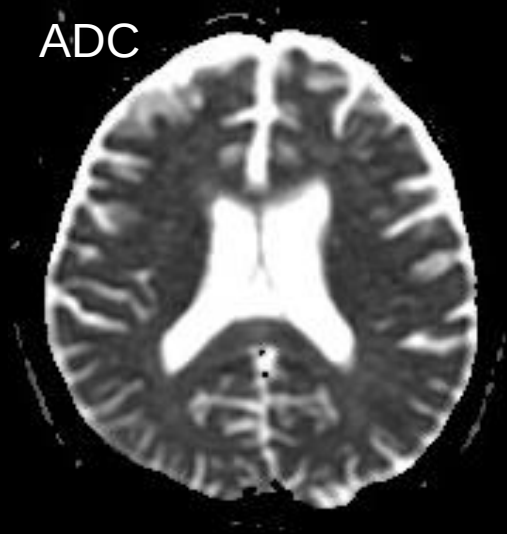
Q04

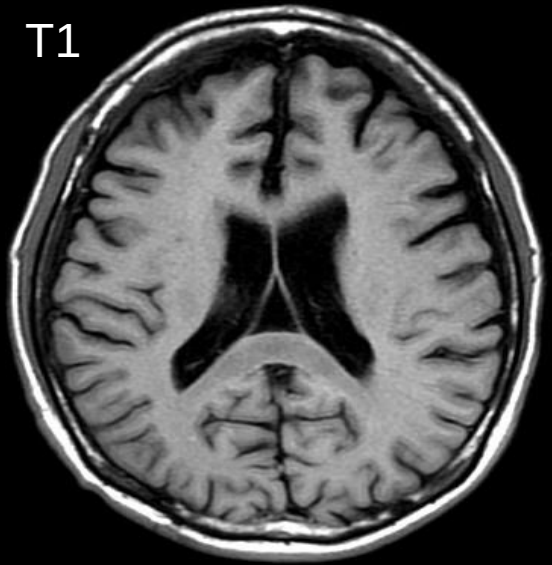
48/M with Hx of alcohol liver disease was sent to our ED due to irritable status

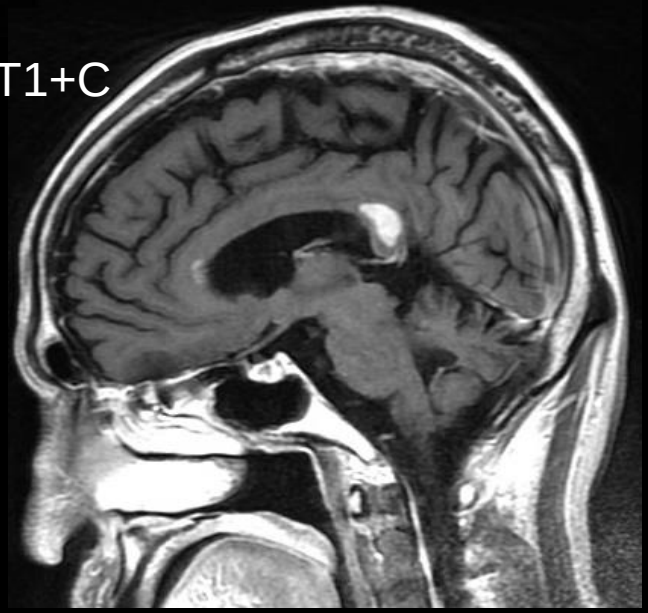










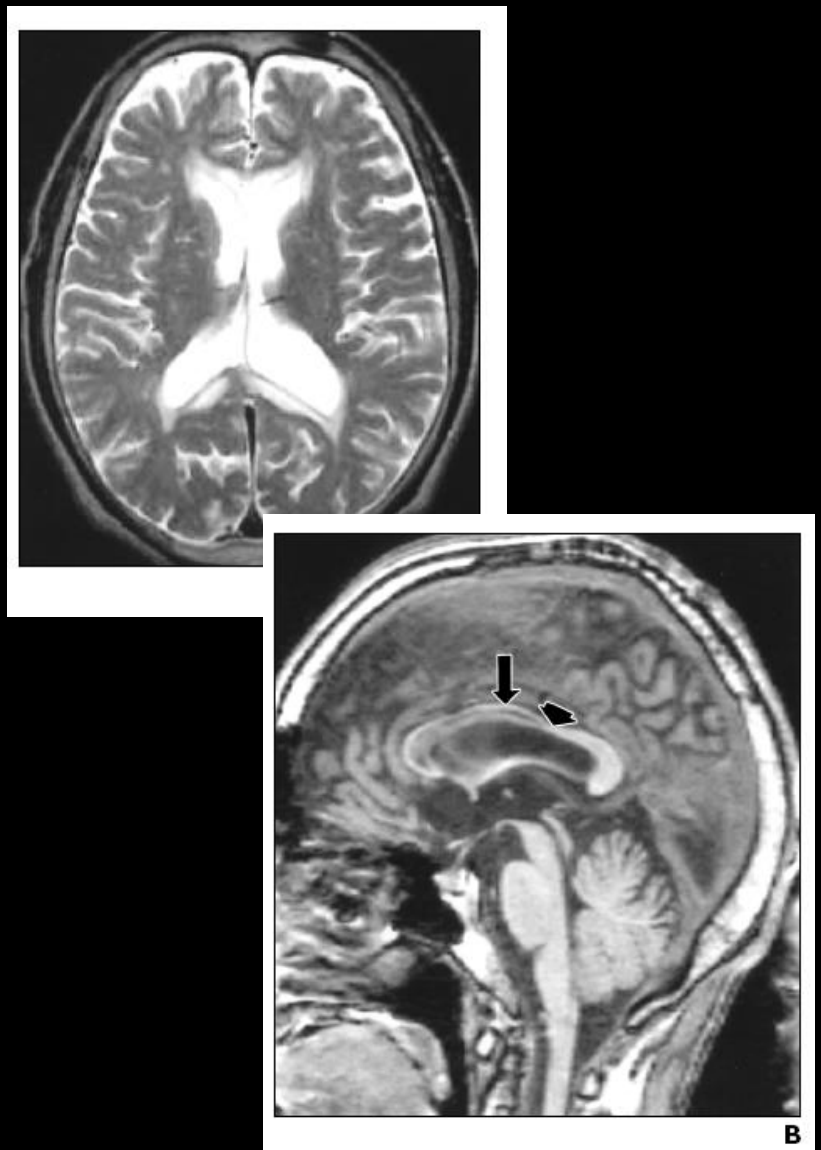


A04

ANS：Marchiafava-Bignami disease

Marchiafava-Bignami disease

- Most in chronic alcoholism and malnutrition,
- Middle-aged to elderly male
- Clinical presentation: motor or cognitive disturbance , a hemispheric disconnection syndrome and/ or seizures.
- Pathology:
  - Deficiency in vitamin B complex
  - Results in necrosis and demyelination of the corpus callosum: body → genu → splenium

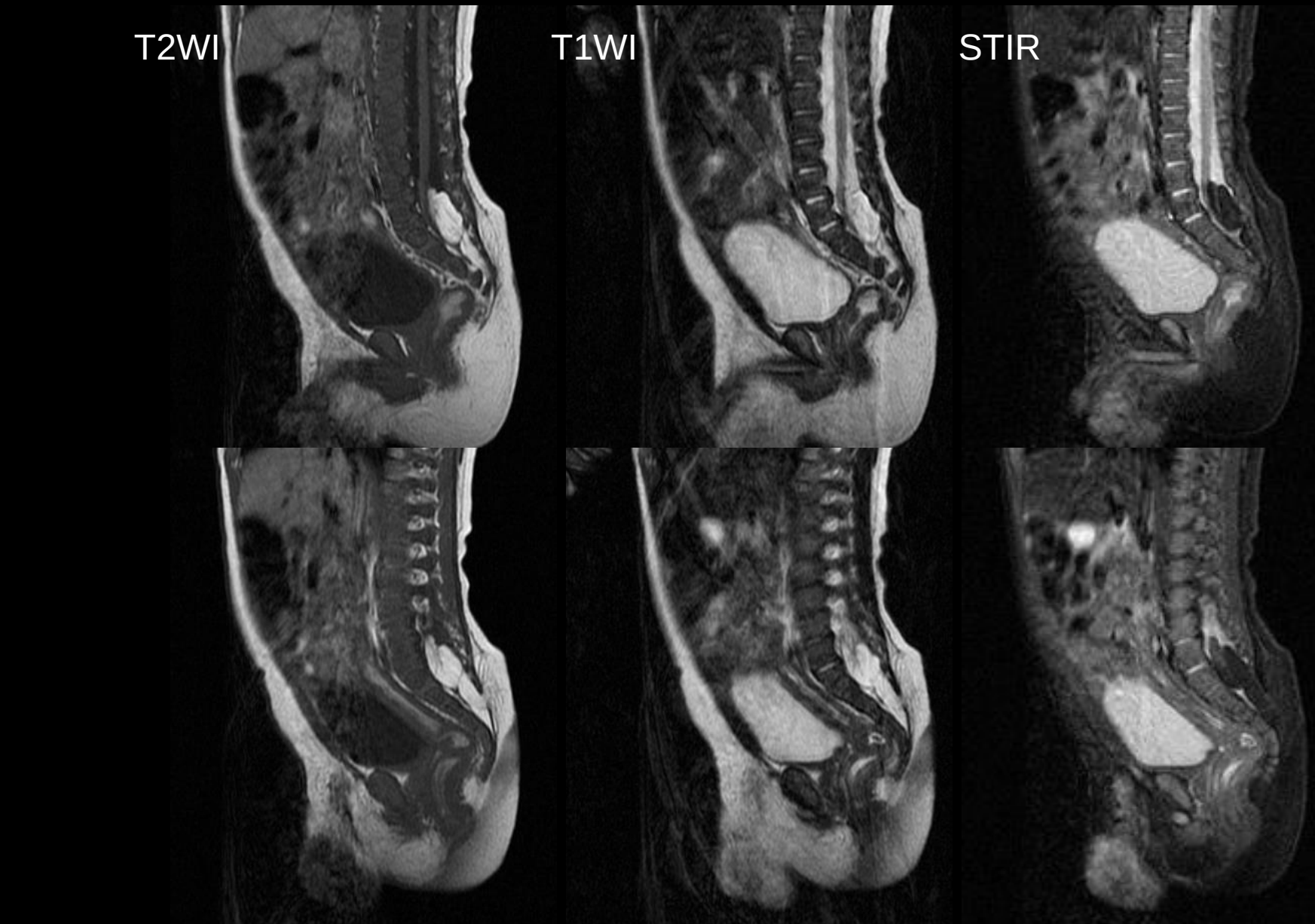


DDx:

1. Multiple sclerosis with callosal demyelination : occurs in a different clinical setting
2. Diffuse axonal injury (DAI) to the corpus callosum : preceding trauma
3. Callosal infarction : rare

Q05

2 m/o male infant, low back mass noted since birth



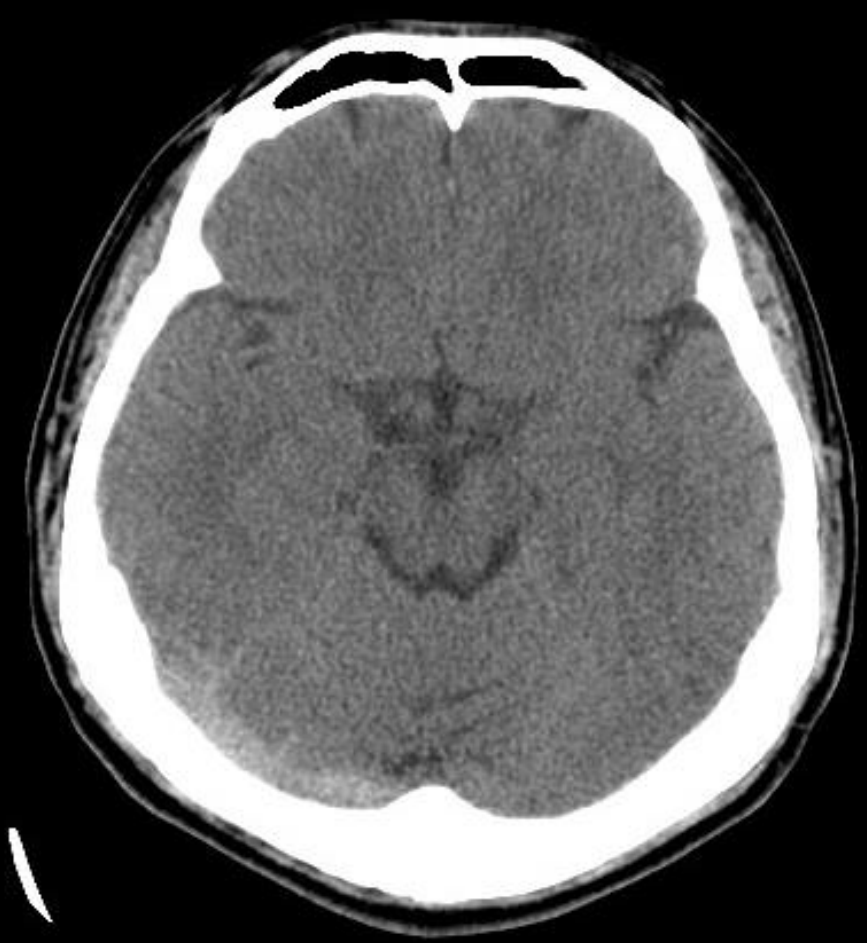
A05

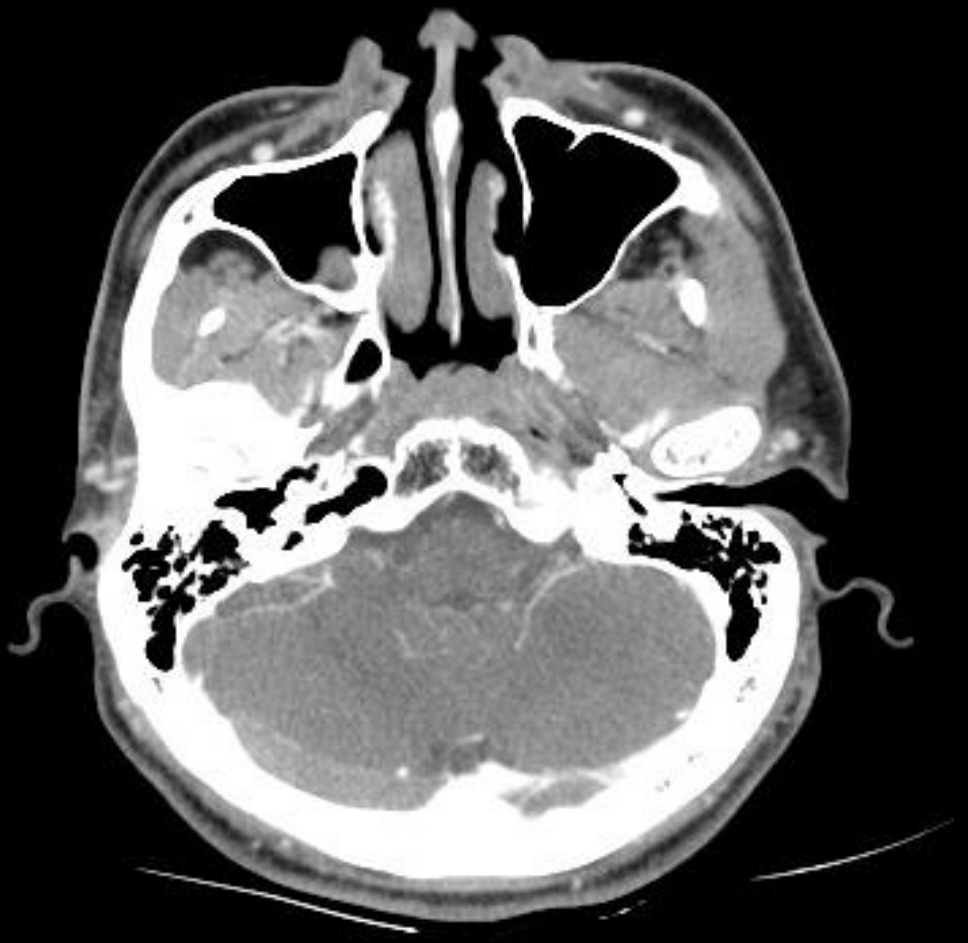
ANS：Lipomeningocele with tethered spinal cord

備註：只寫 Lipomeningocele 或 tethered spinal cord 各得一分

Q06

37y/o, headache for 3 days





A06

ANS：Sinus thrombosis
(in right transverse sinus)

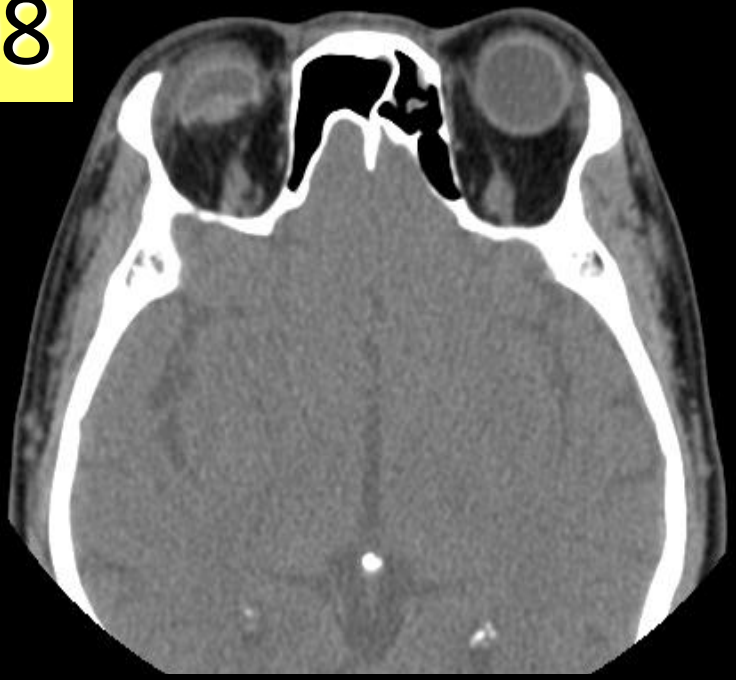
Q07

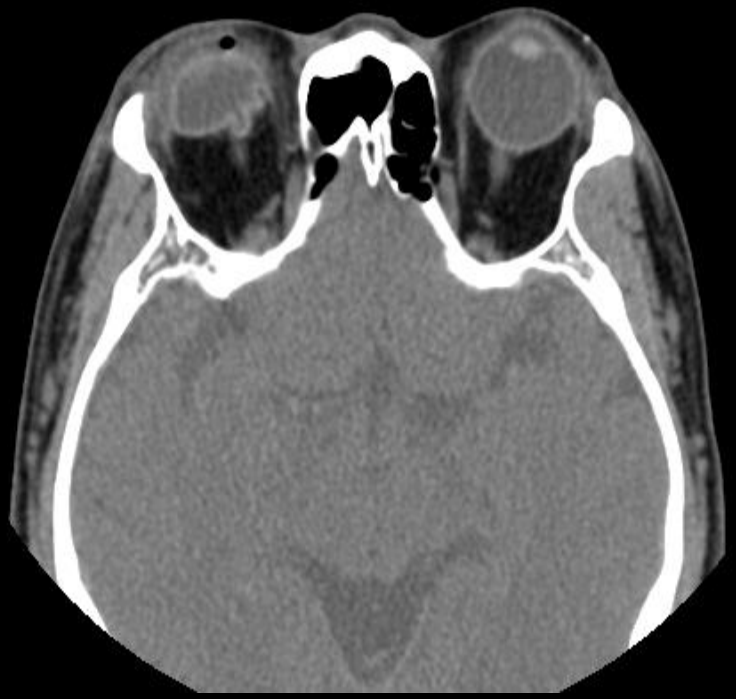
M/55
Headache, right side weakness
for several days.

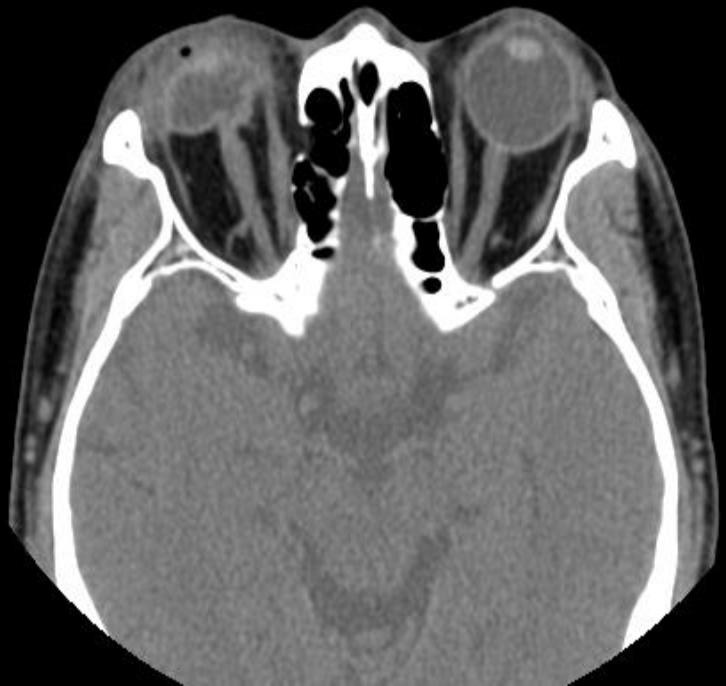
A07

ANS：Isodense chronic subdural hematoma

Q08





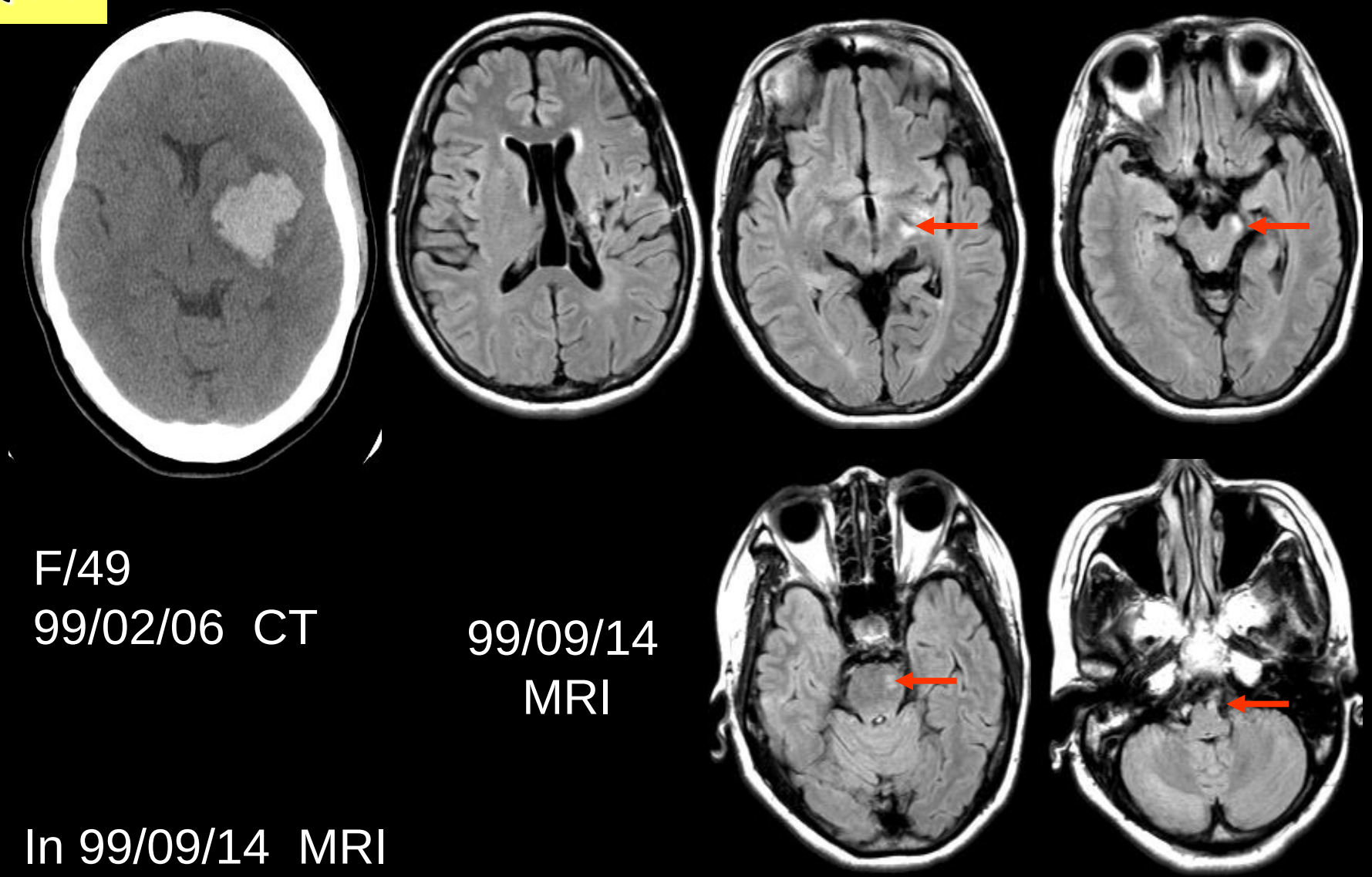


M/54 severe right eye pain, blindness after trauma

A08

ANS： Right eyeball ruptured

Q09



F/49
99/02/06 CT

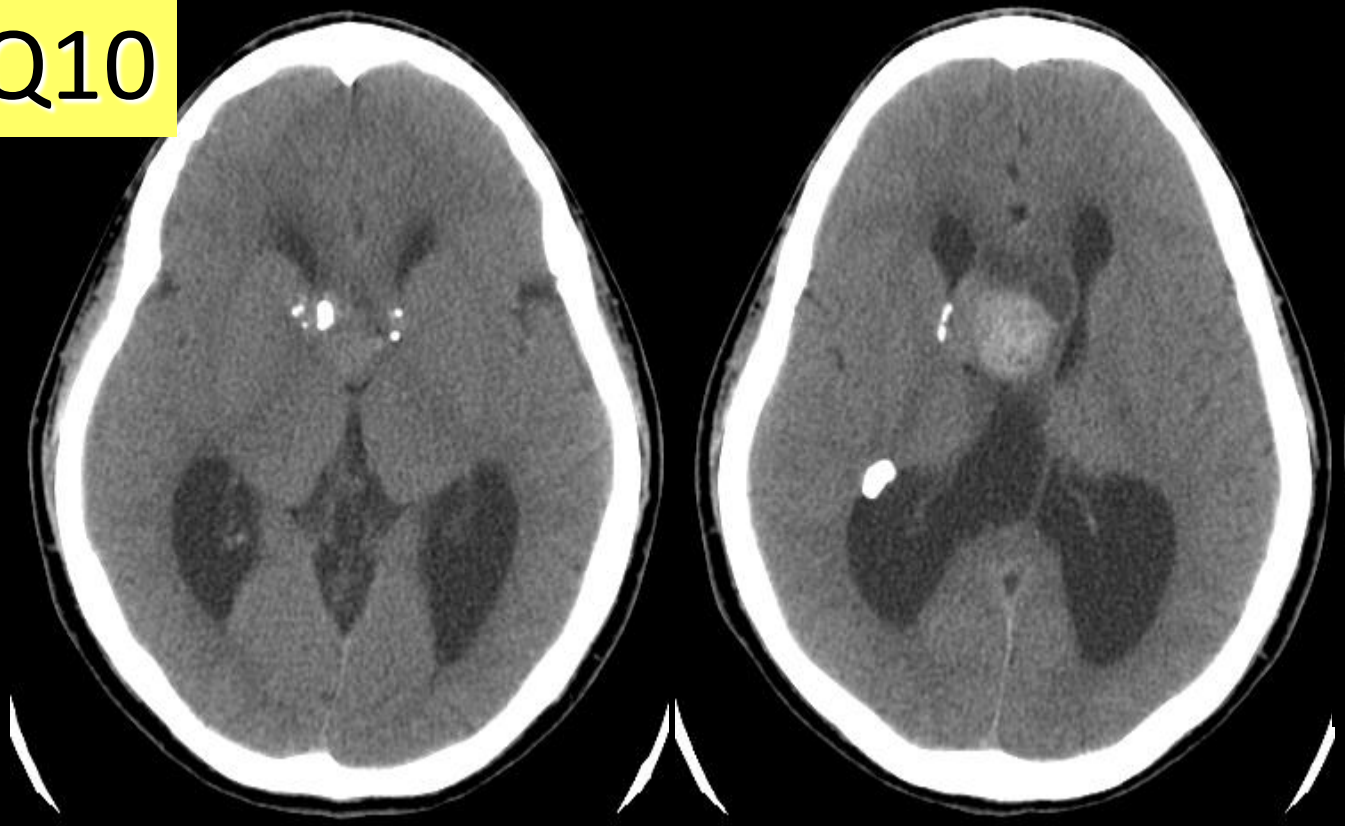
99/09/14
MRI

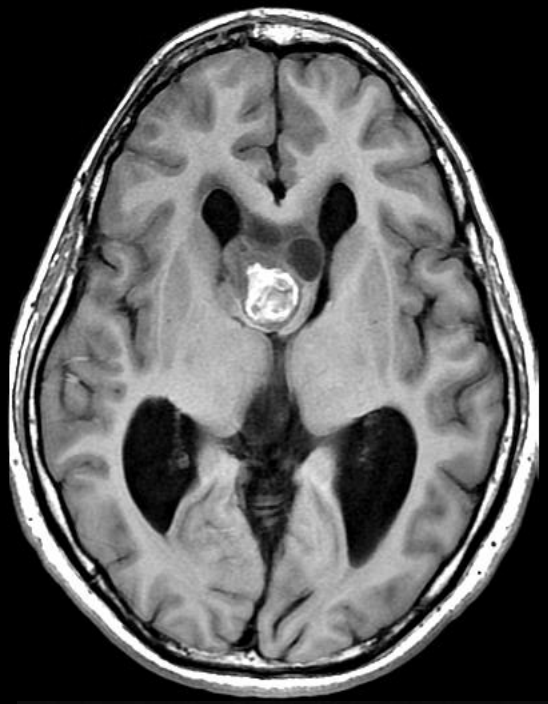
In 99/09/14 MRI
What is the red arrows point?

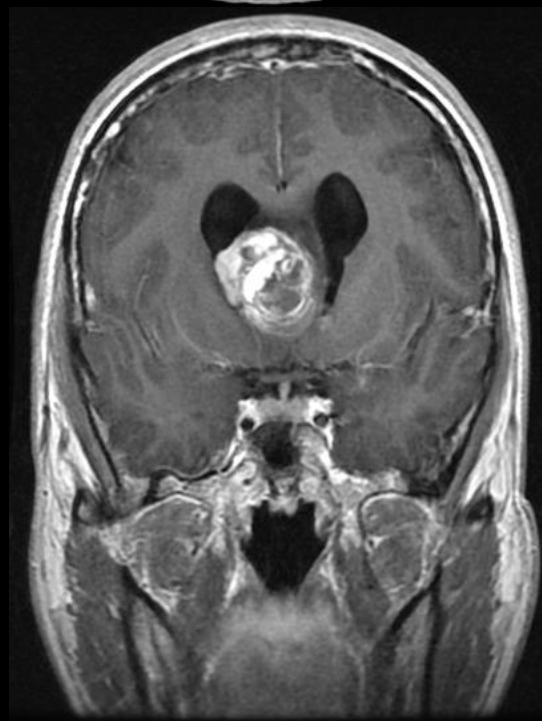
A09

ANS：Wallerian degeneration along the corticospinal tract

Q10







M/29
Epilepsy, headache

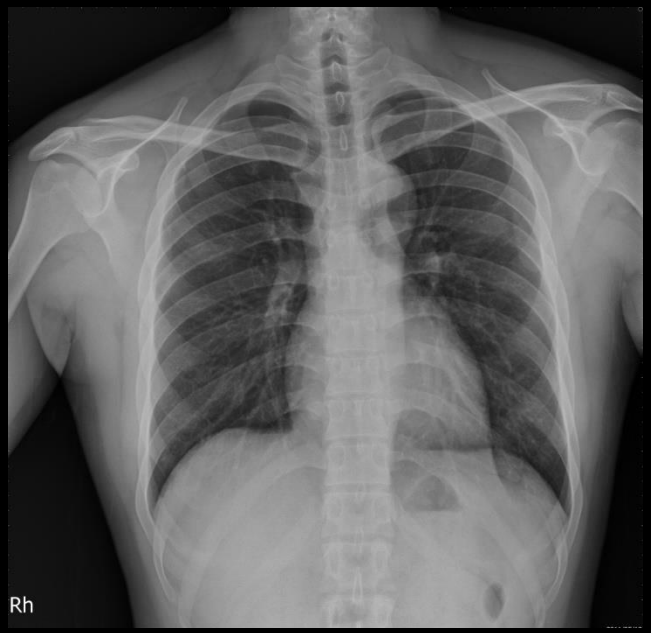
A10

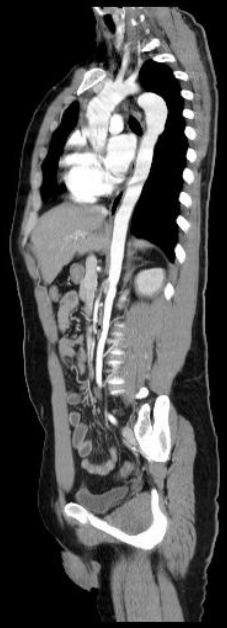
ANS：Tuberous sclerosis with giant cell astrocytoma

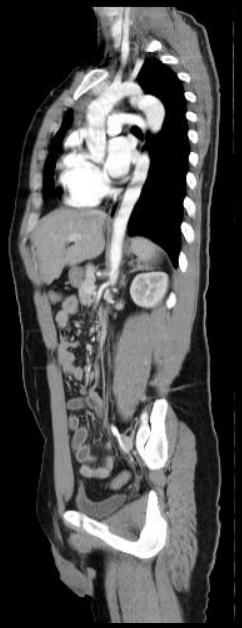
CH

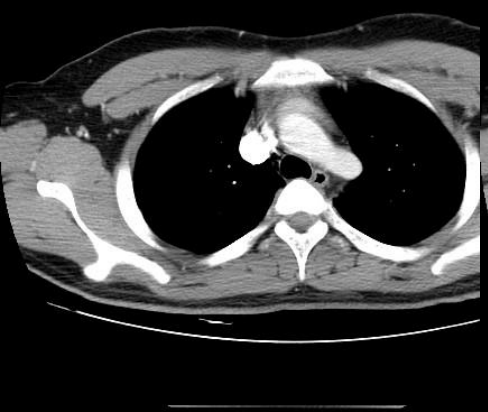
Q11

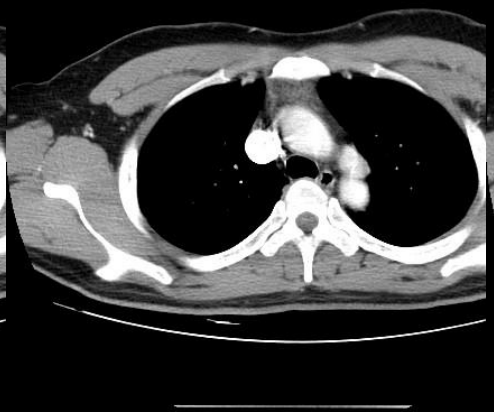
Male, 27y/o, elevated blood pressure for 9 years

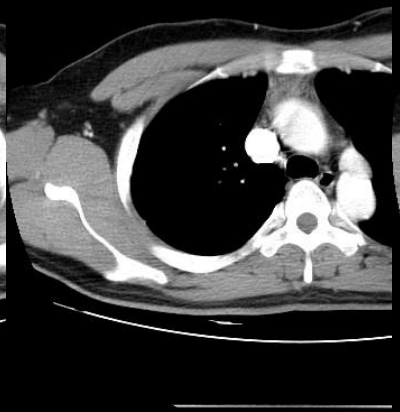


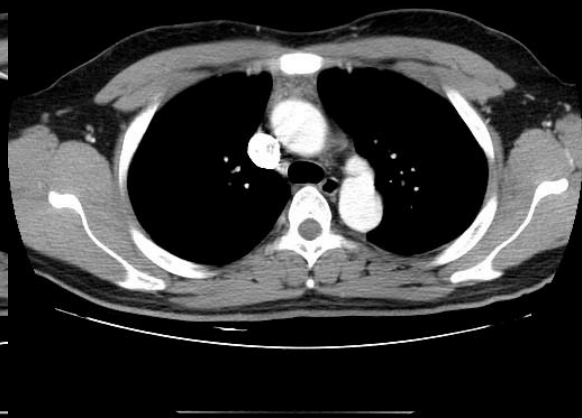










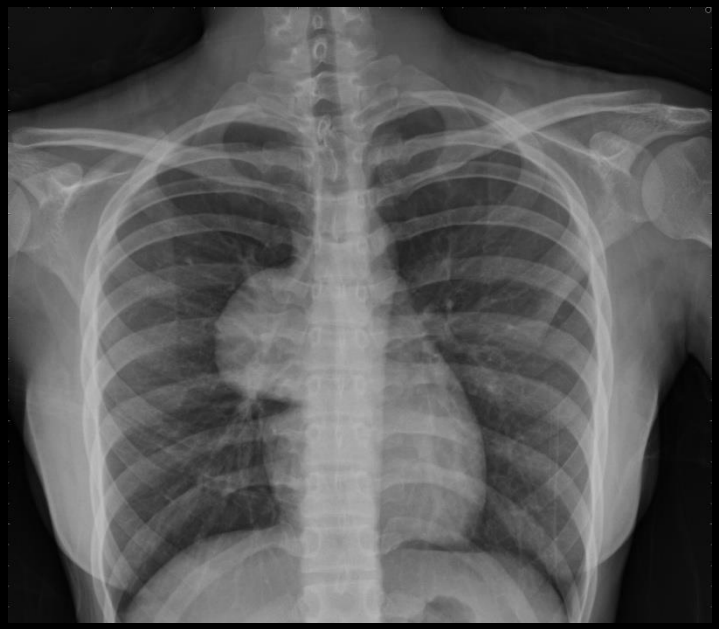


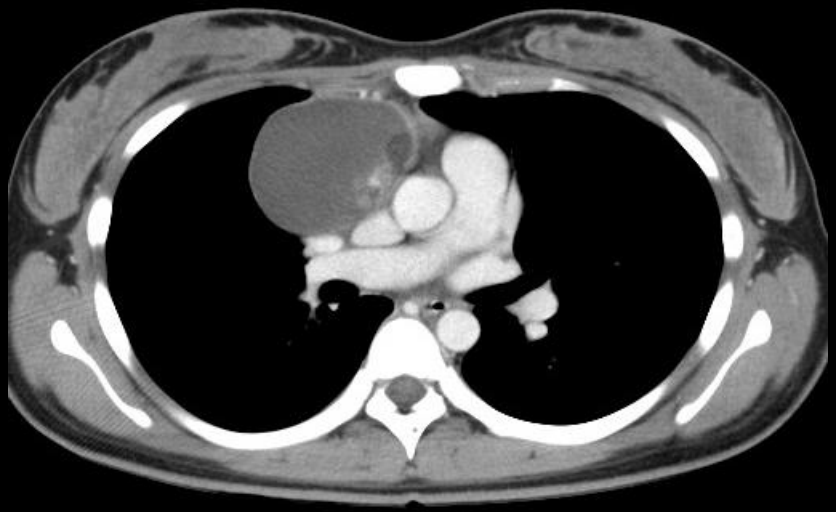
A11

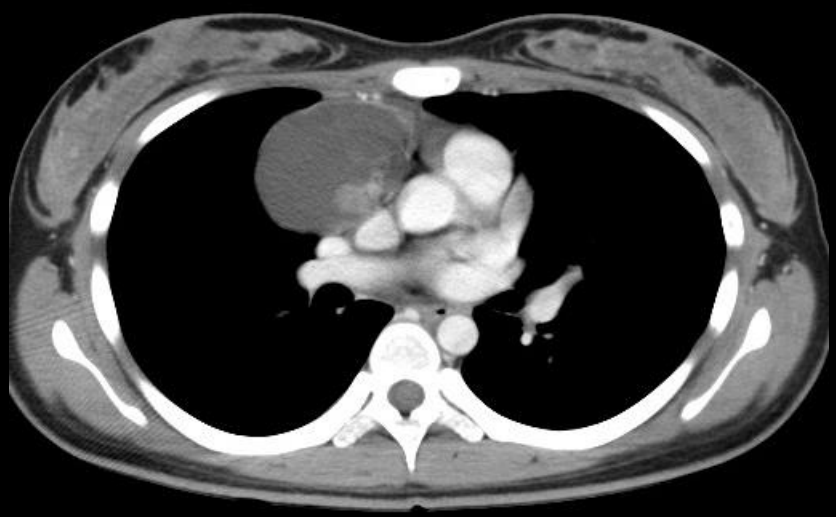
ANS：Pseudocoarctation of aorta

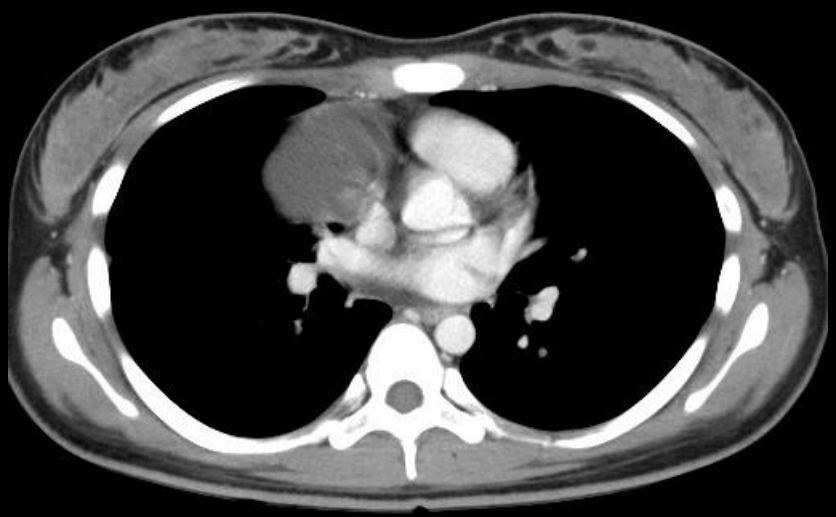
Q12

female, 16y/o, incidental finding at health examination.







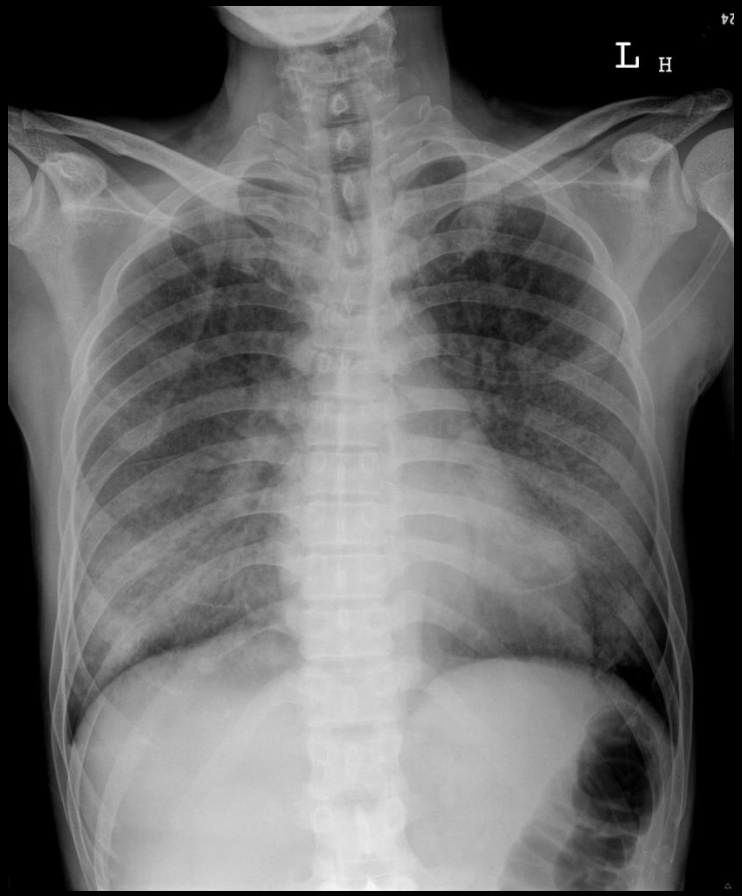


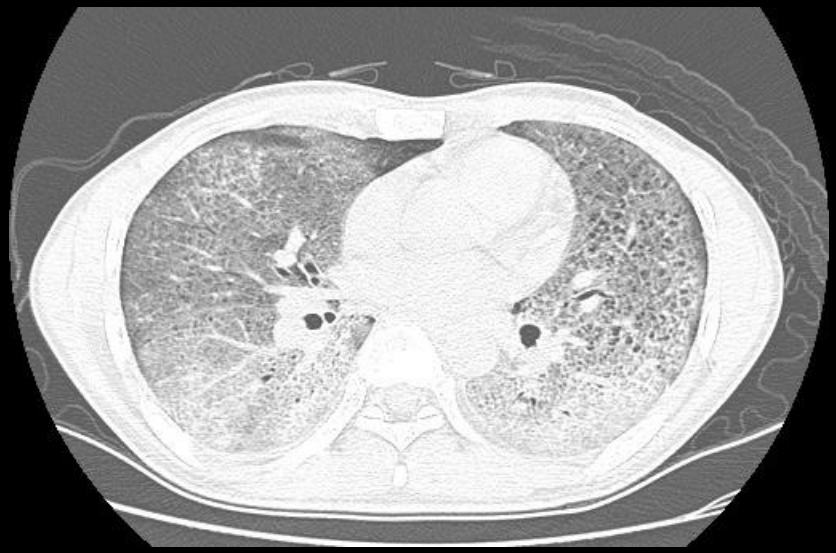
A12

ANS：Mature cystic teratoma

Q13

male, 45y/o, HIV (+)



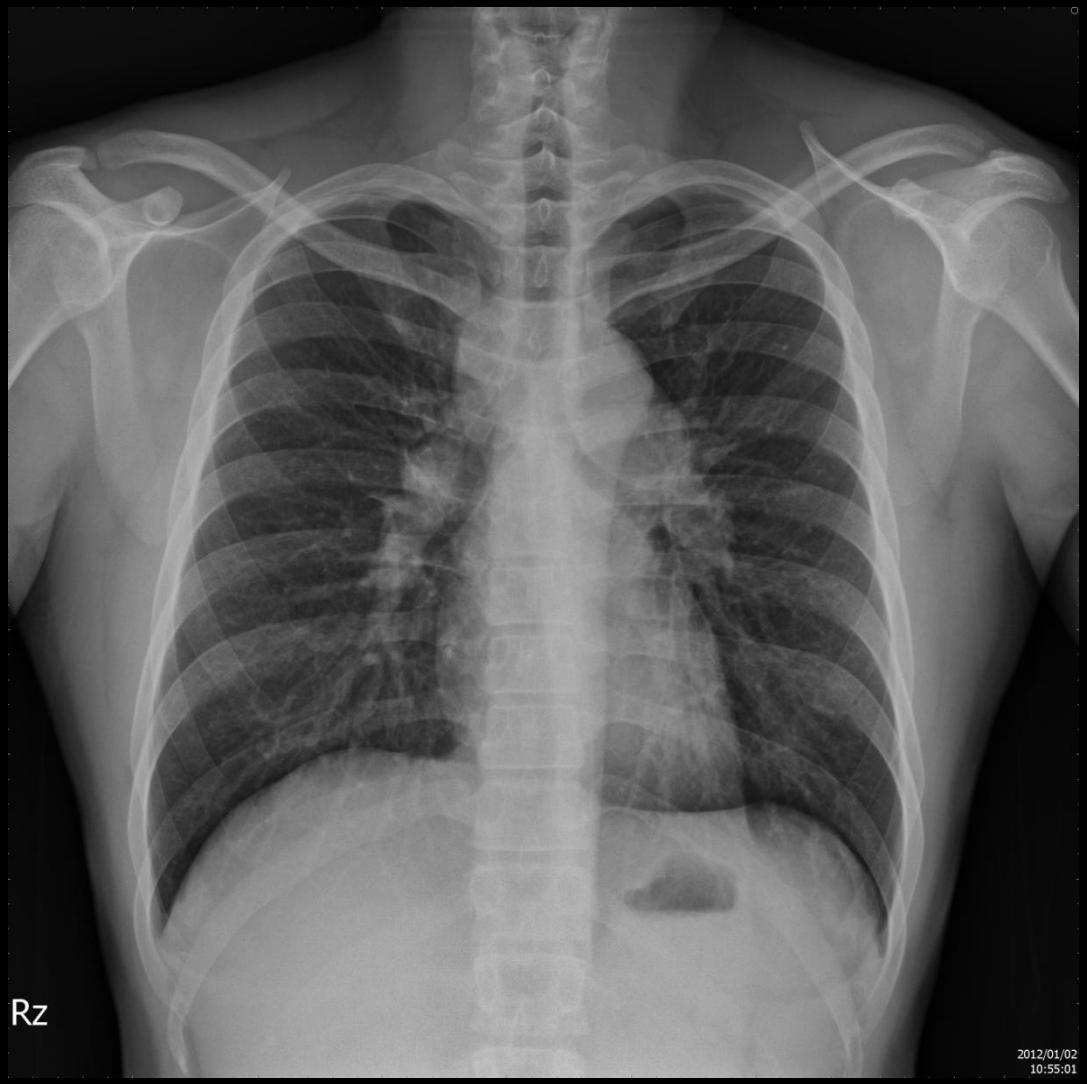


A13

ANS： Pneumocystis jiroveci pneumonia

Q14

Male, 29y/o, asymptomatic



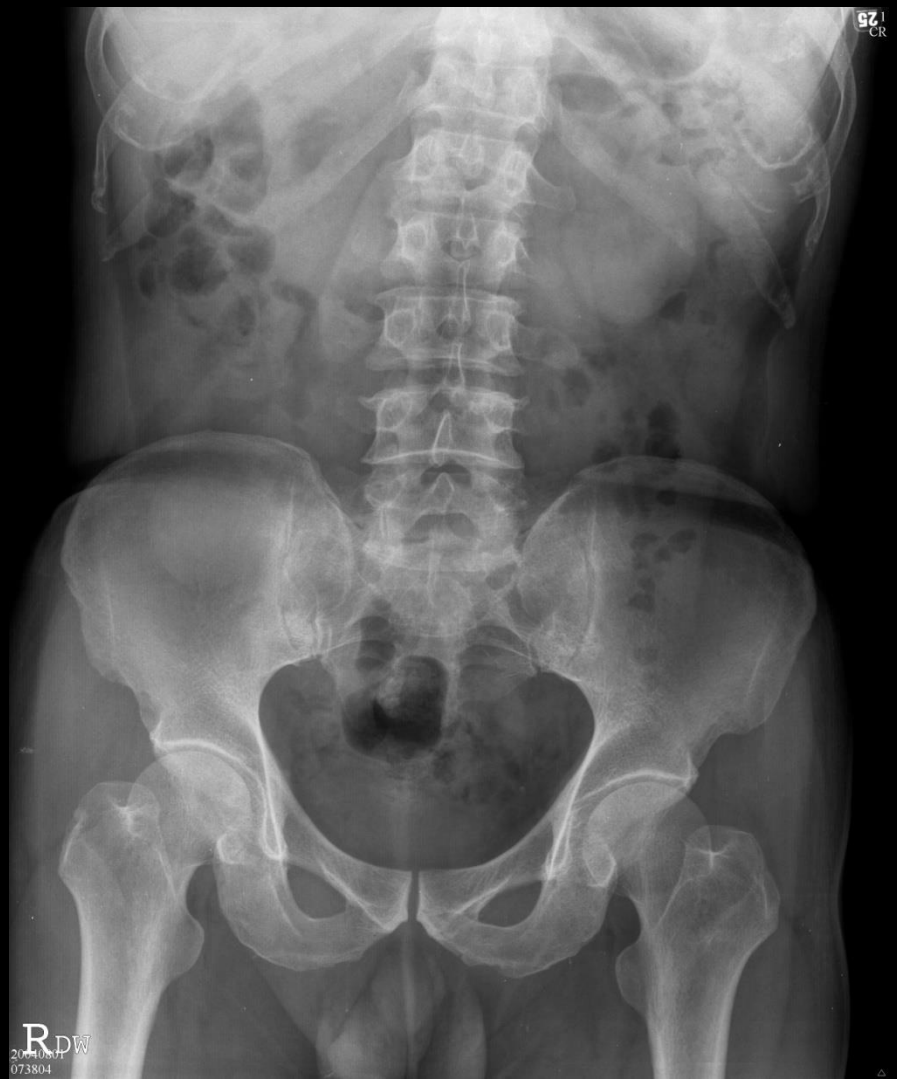
A14

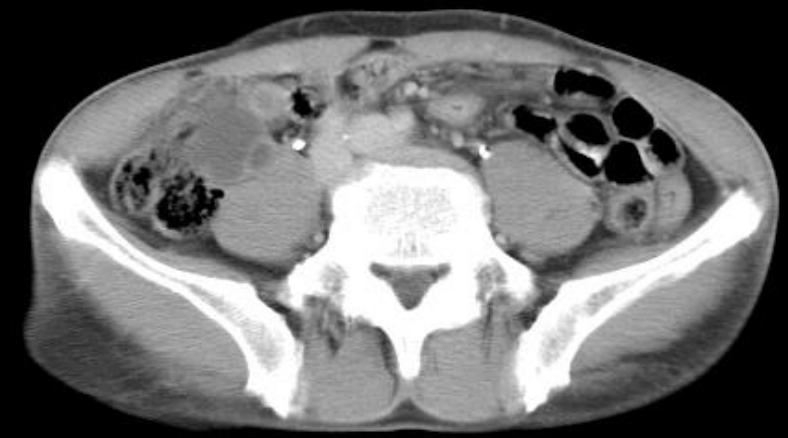
ANS：Sarcoidosis

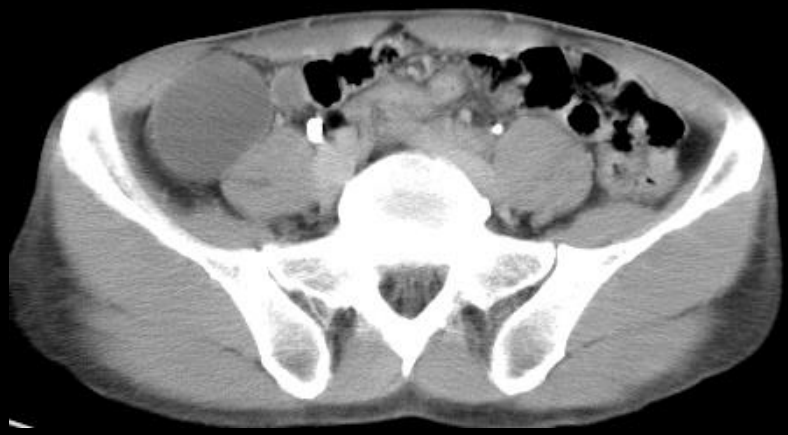
GI

Q15

58 y/o male
palpable RLQ mass for months





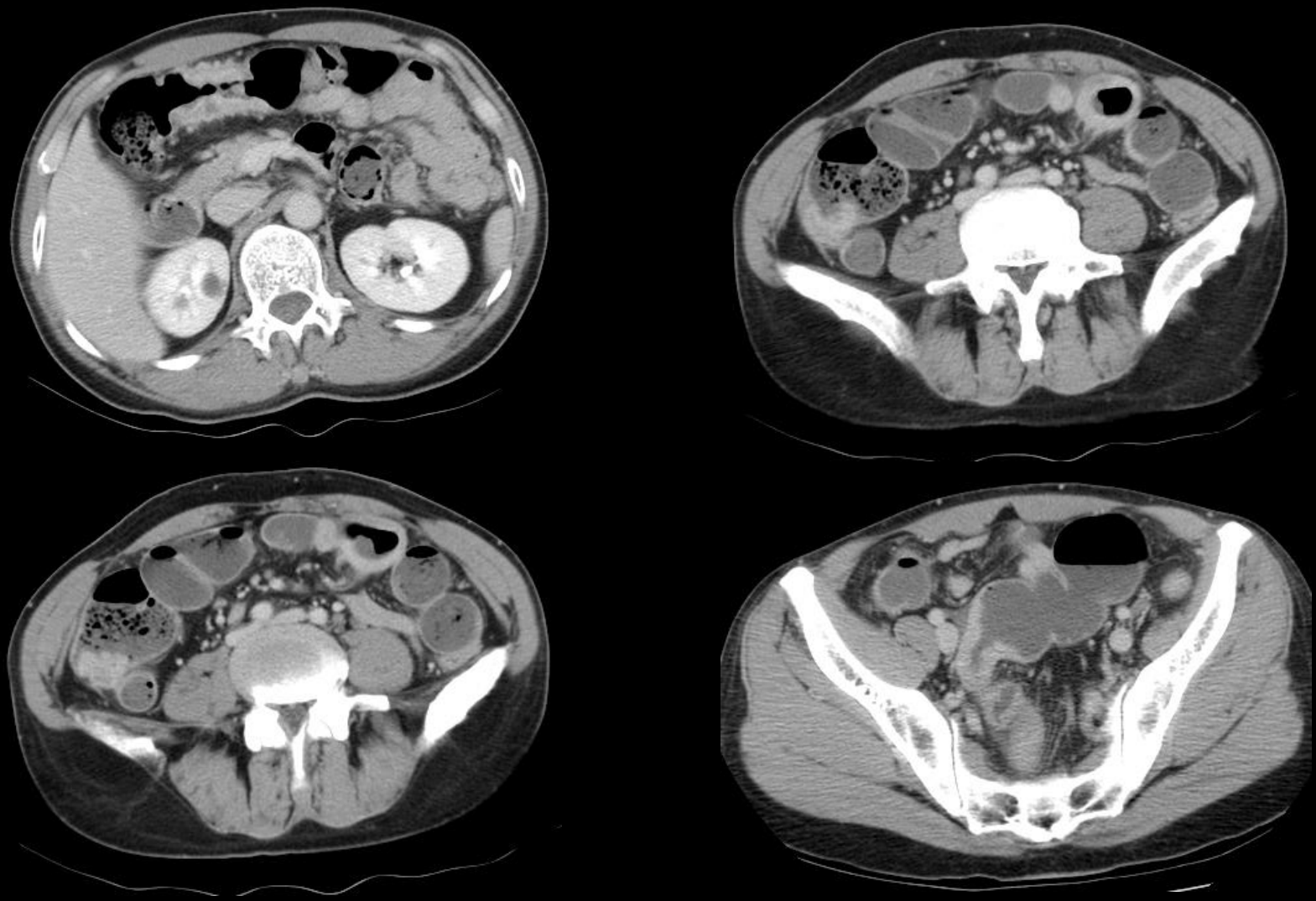


A15

ANS：**Diagnosis:**
Appendical mucocele (mucinous adenoma of appendix)

Q16

48 y/o male
periumbilical pain for several days



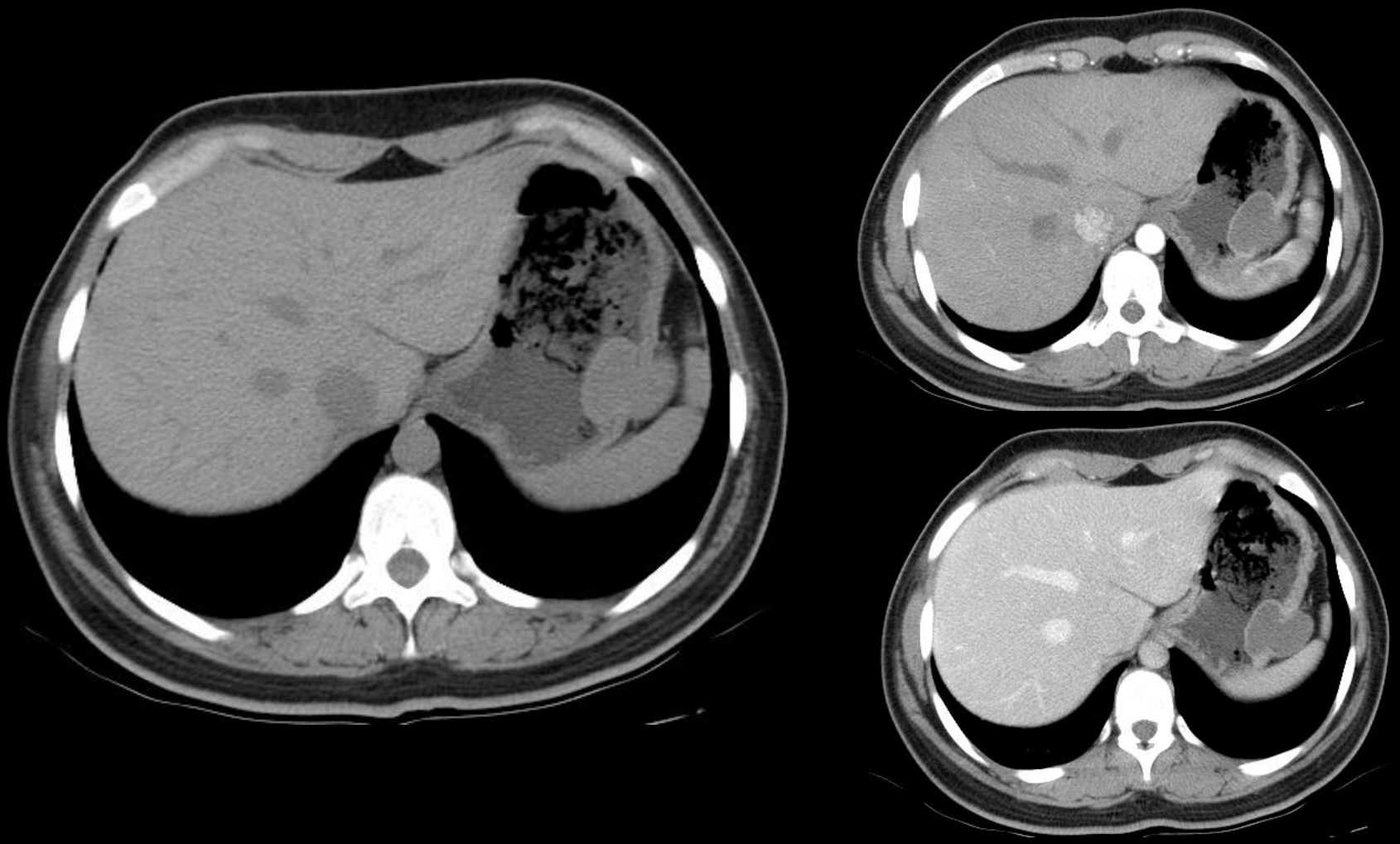
A16

ANS：**Diagnosis:**

TB intestine

Q17

19 y/o female
vomiting with coffee ground vomitus

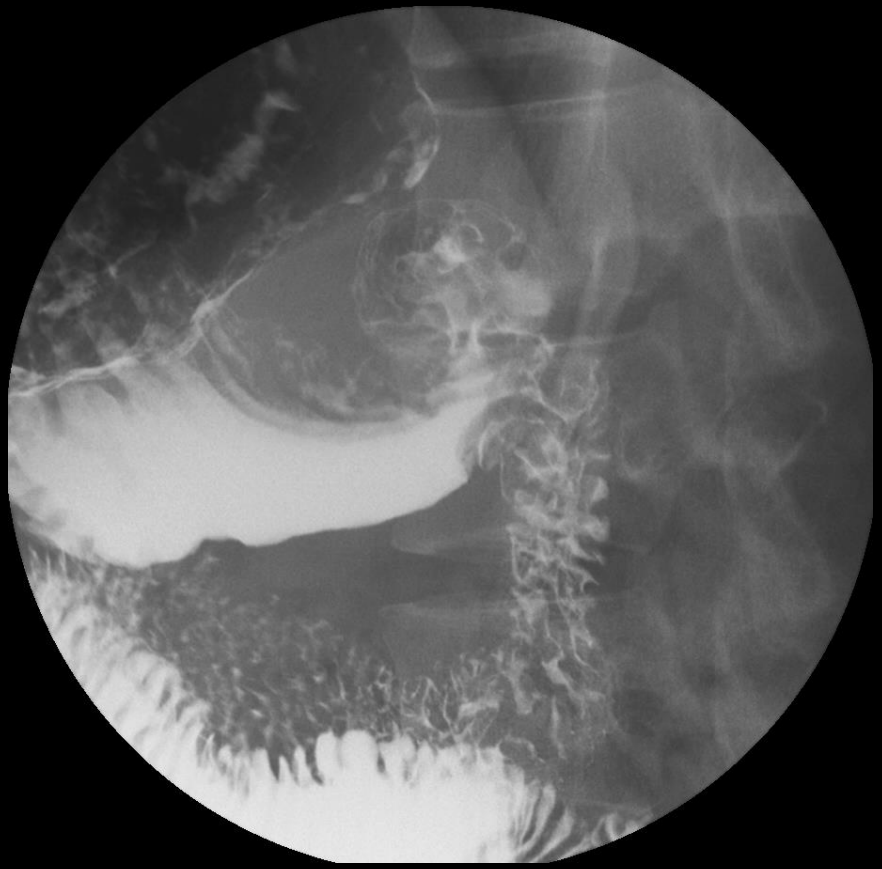


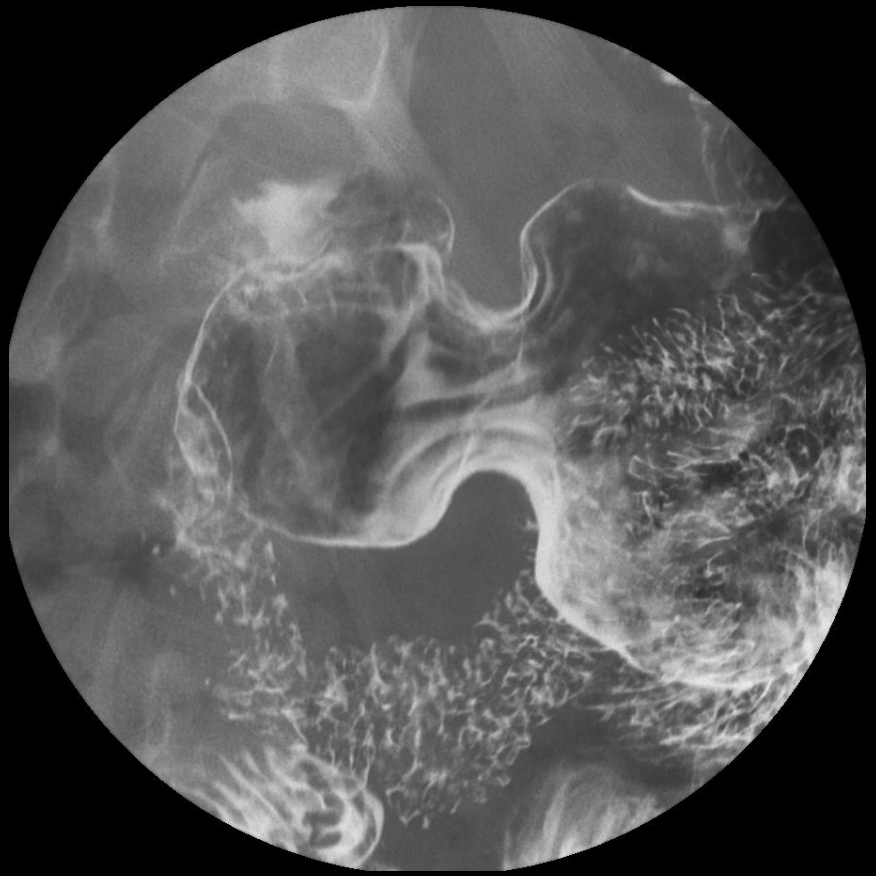
A17

ANS：**Diagnosis:**
Gastric duplication cyst

Q18

23 y/o female
epigastric pain and nausea for months



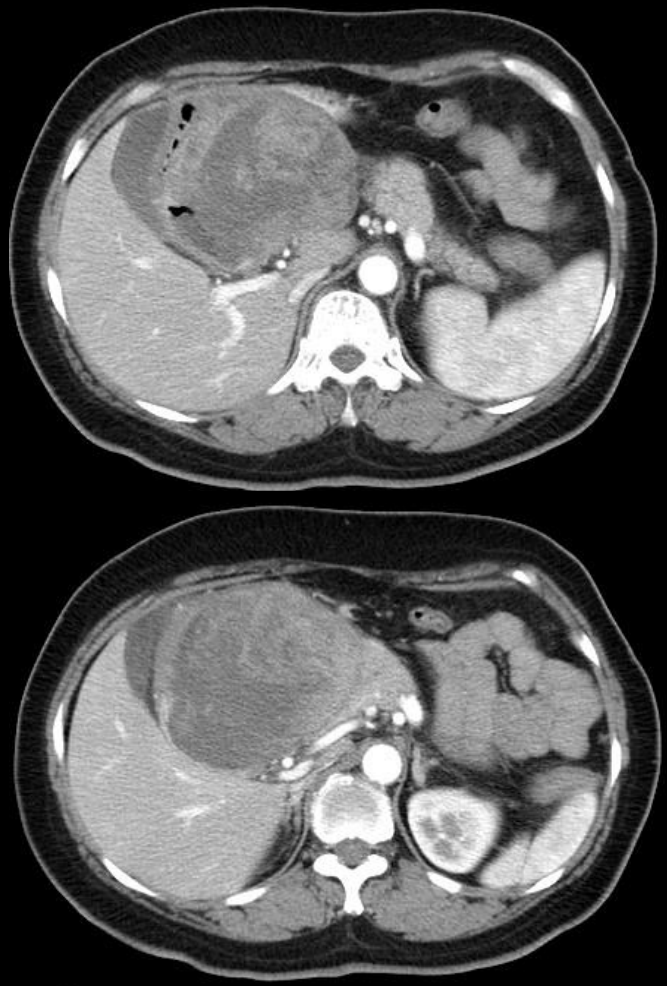


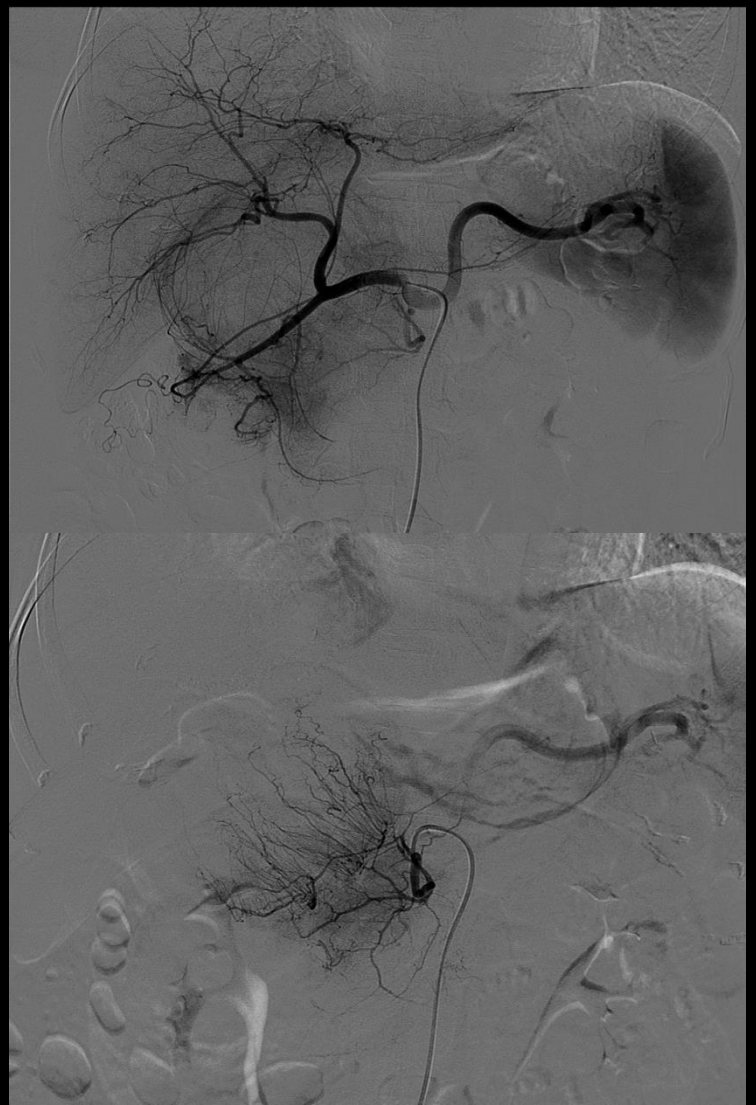
A18

ANS：**Diagnosis:**
Ectopic pancreatic rest

Q19

52 y/o female
intermittent epigastric pain for 1 month





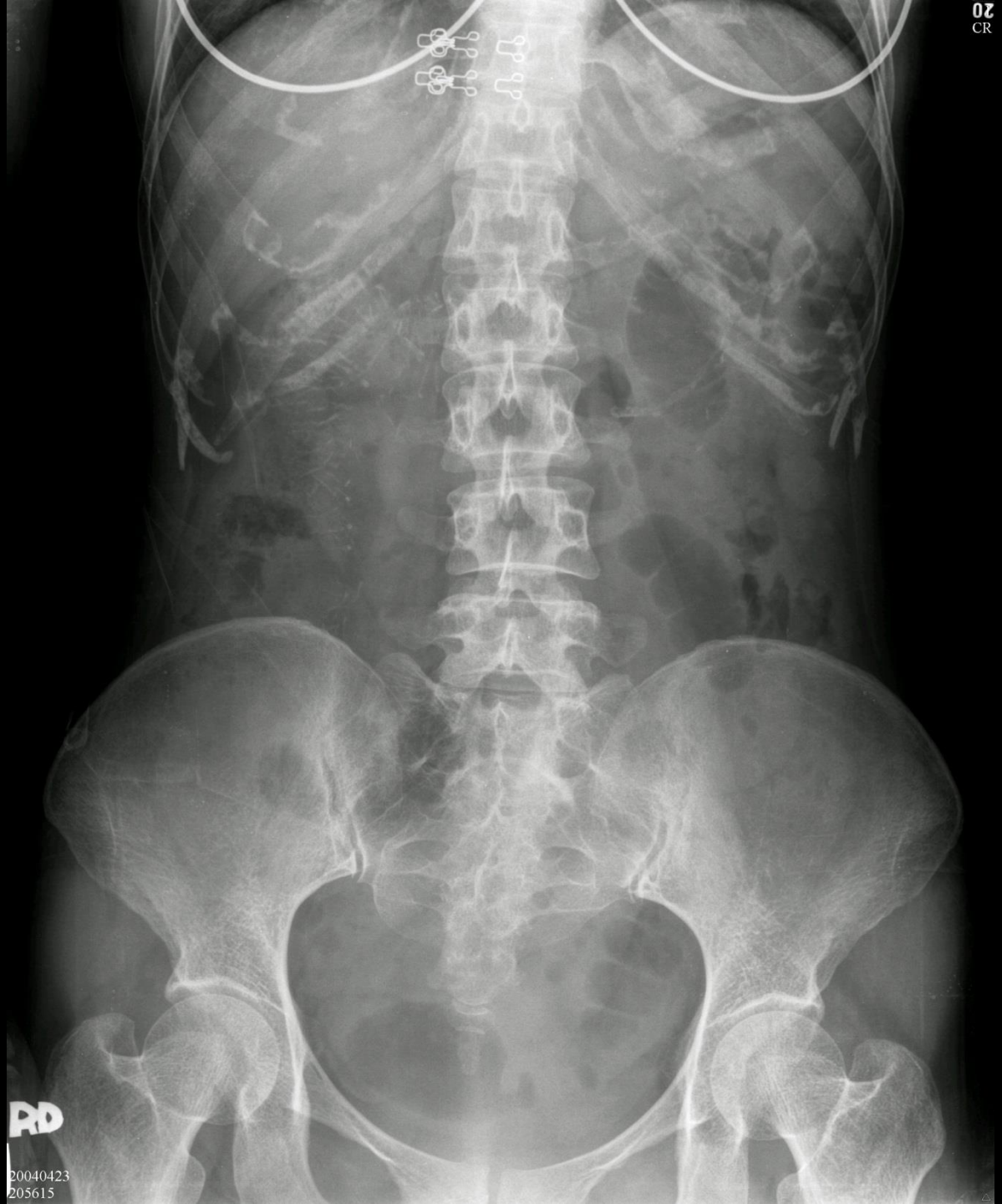
A19

ANS：**Diagnosis:**

(1) Islet cell tumor of pancreas (1分)

(2) blood supply from dorsal pancreatic artery (1分)

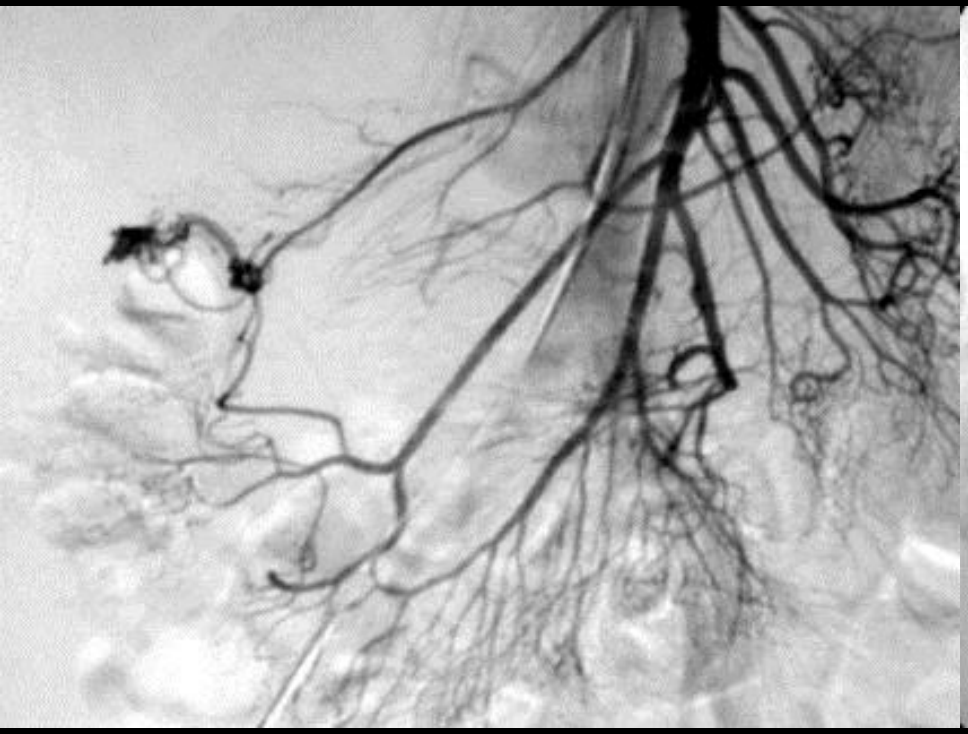
Q20

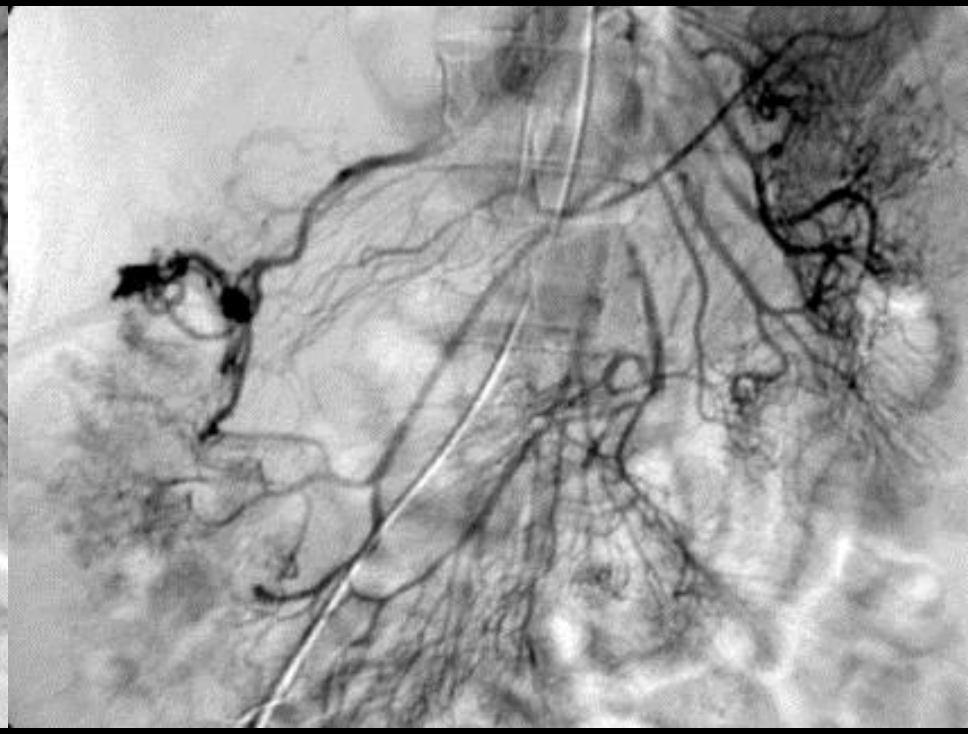


A20

ANS：Phlebosclerotic colitis

Q21



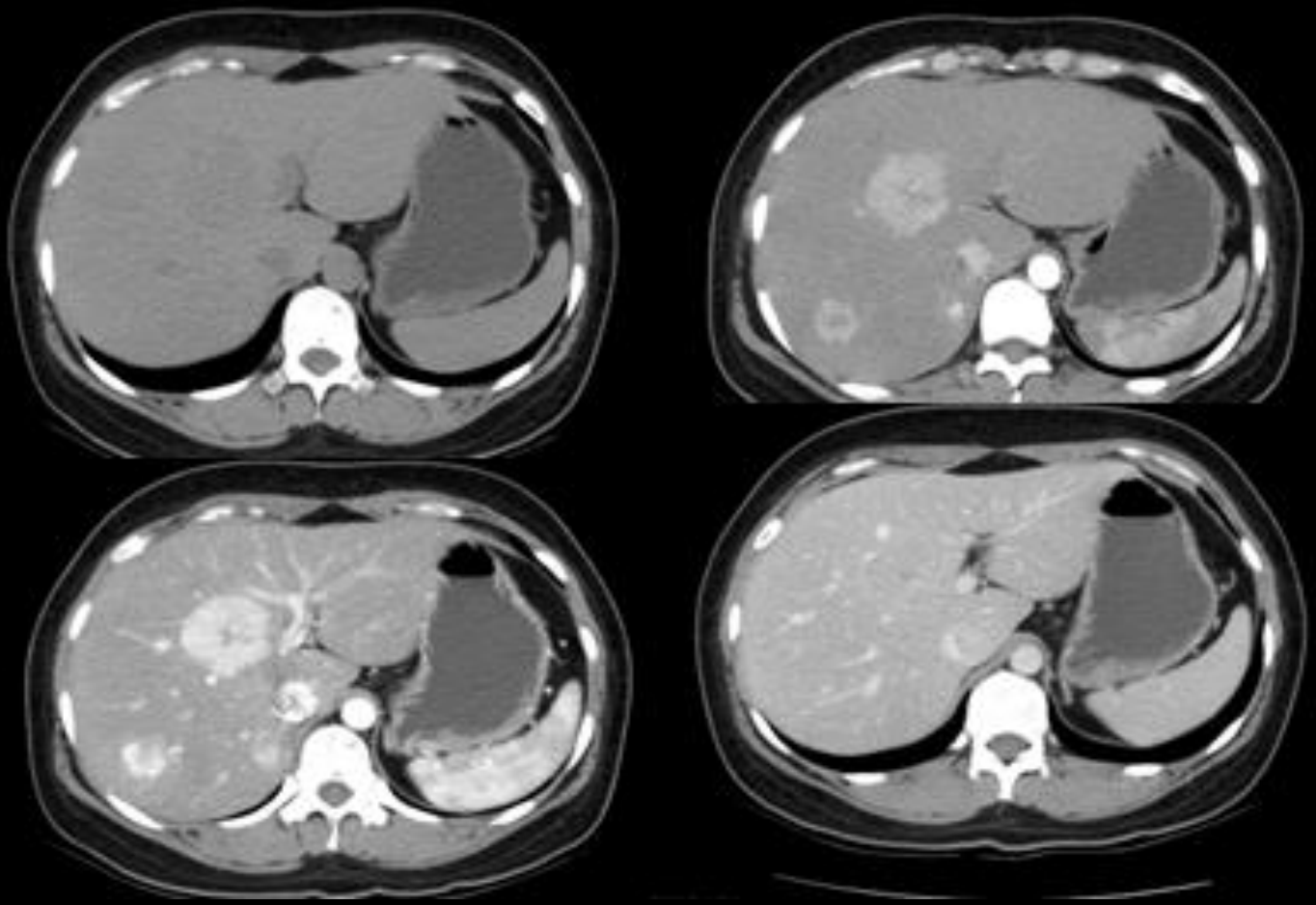


A21

ANS： angiodysplasia

Q22

Case :47 ,female 25 year-old

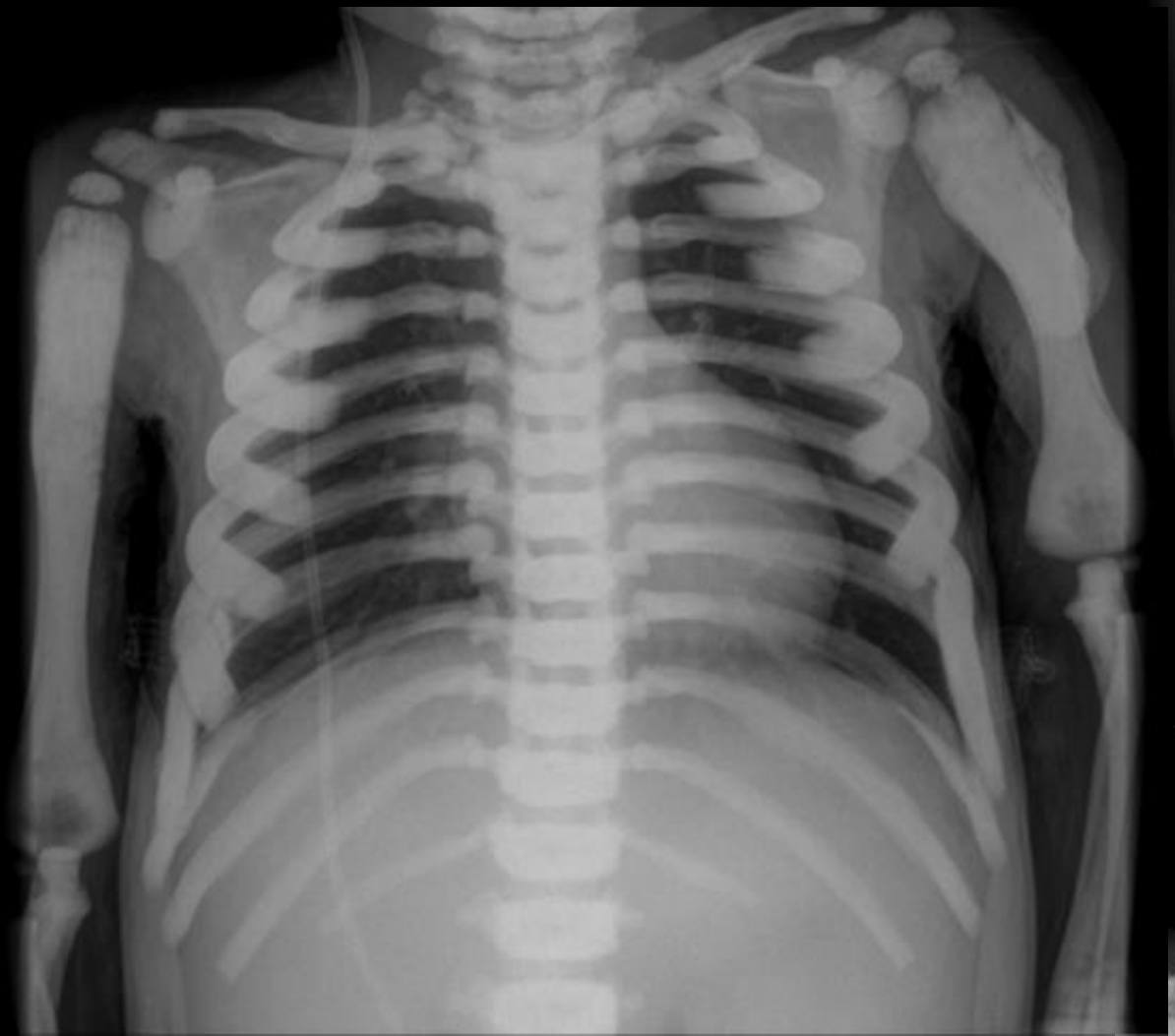


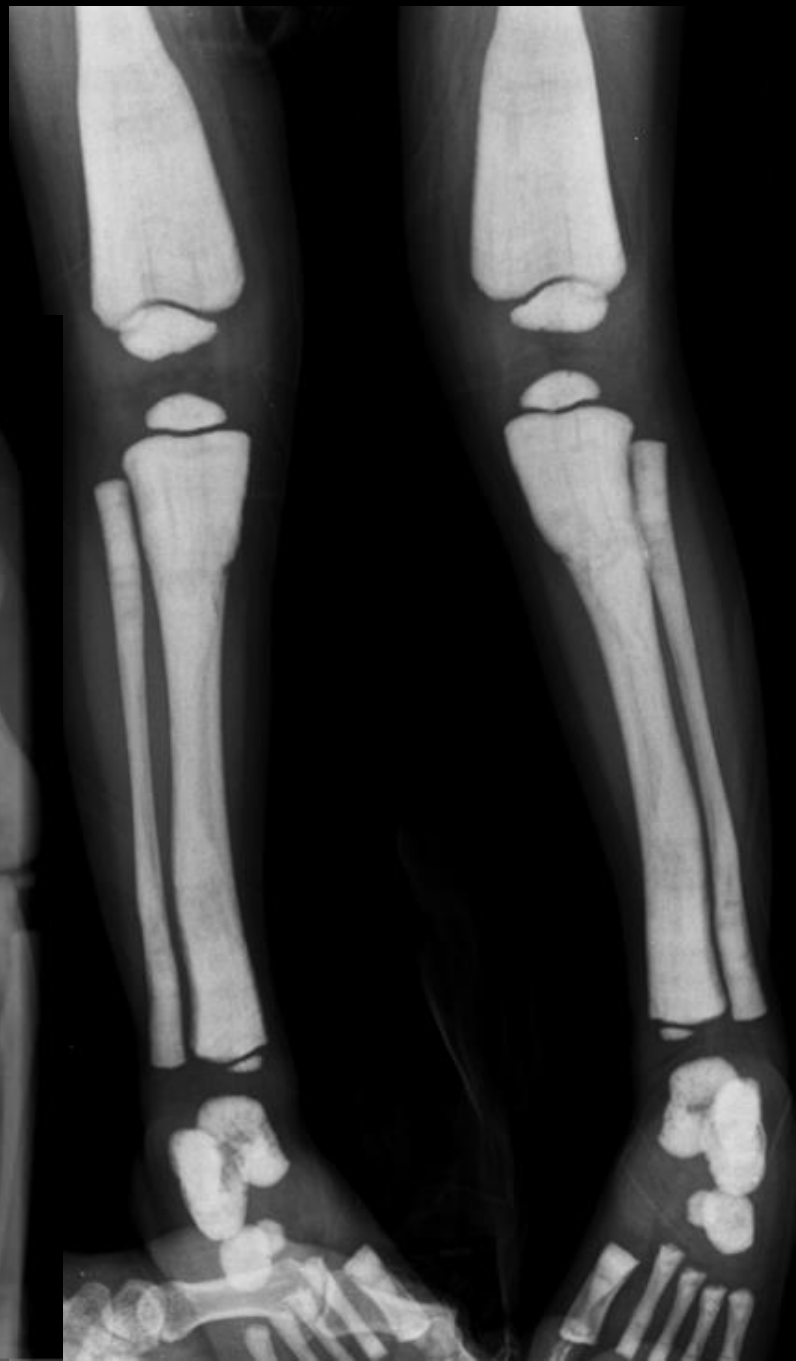
A22

ANS：Focal nodular hyperplasia

Q23

3 y/o boy



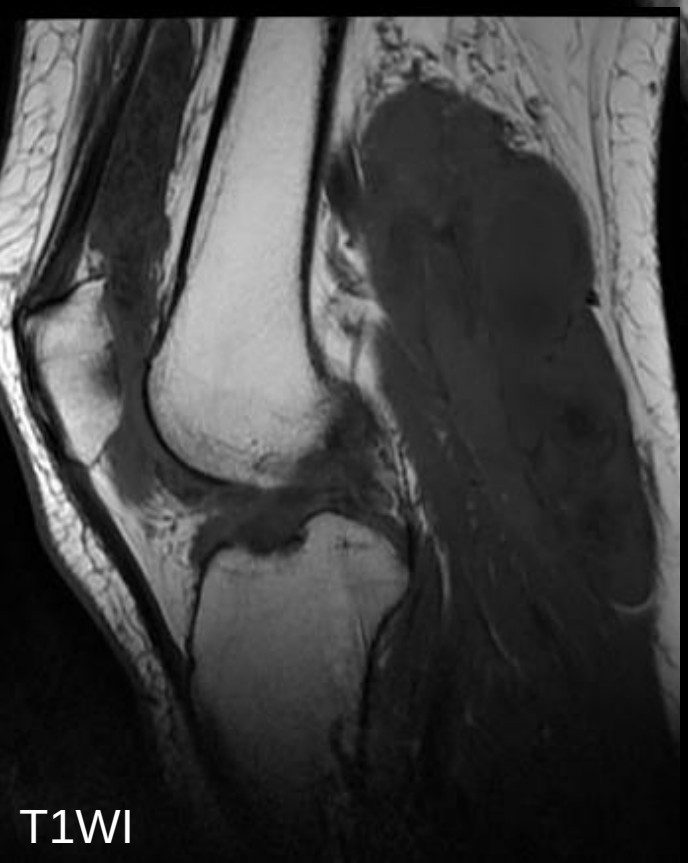


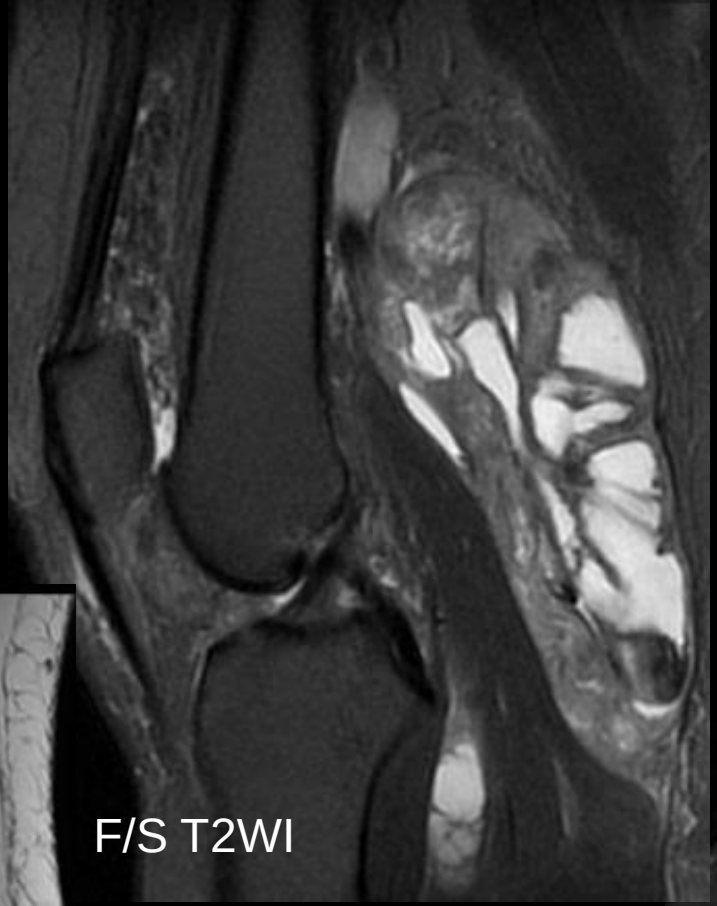
A23

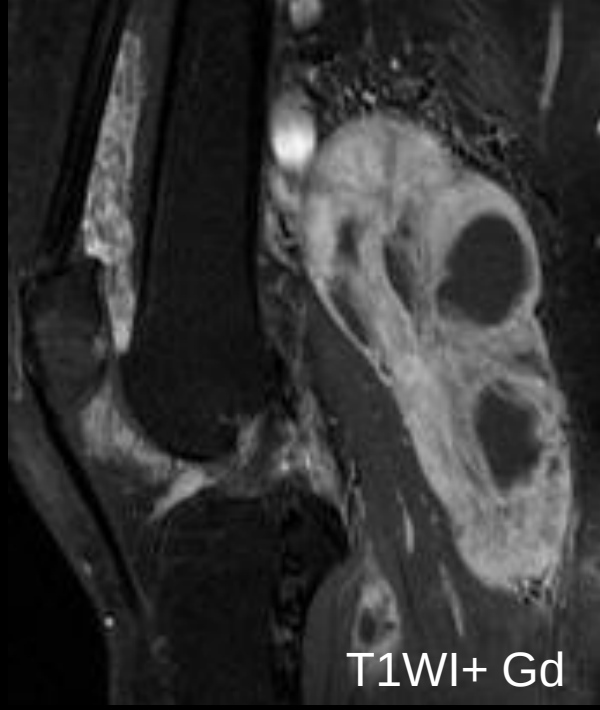
ANS：Osteopetrosis

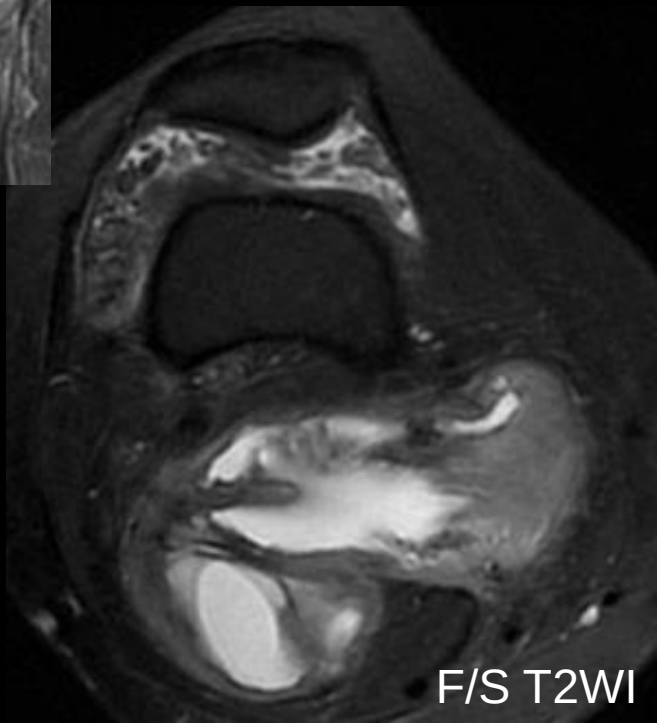
Q24

CC: 45 y/o female, palpable popliteal mass for months







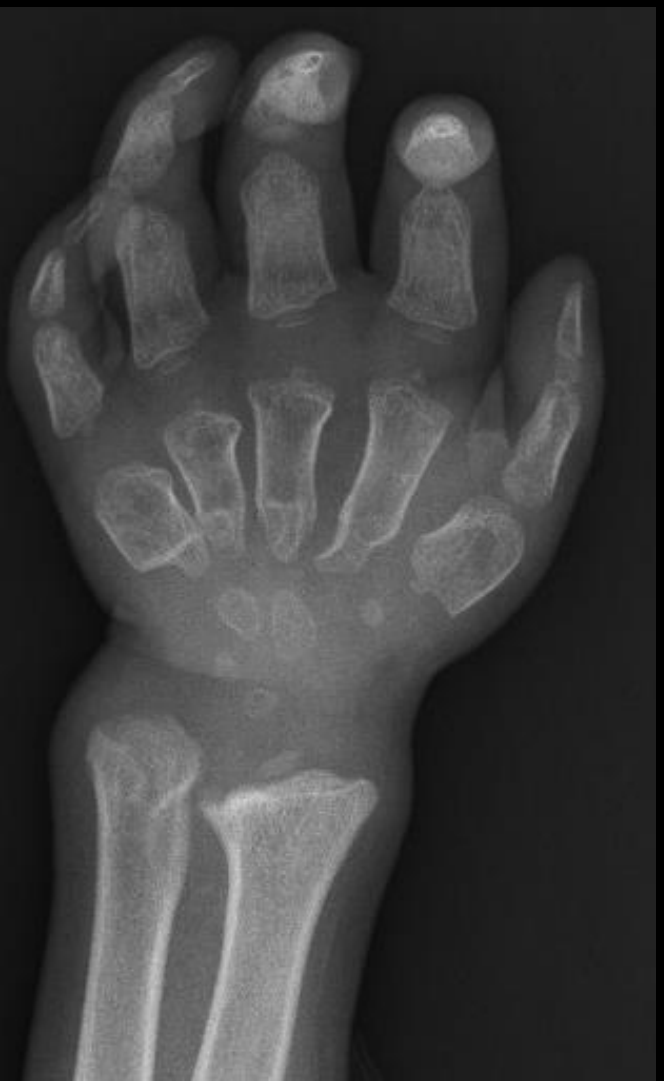


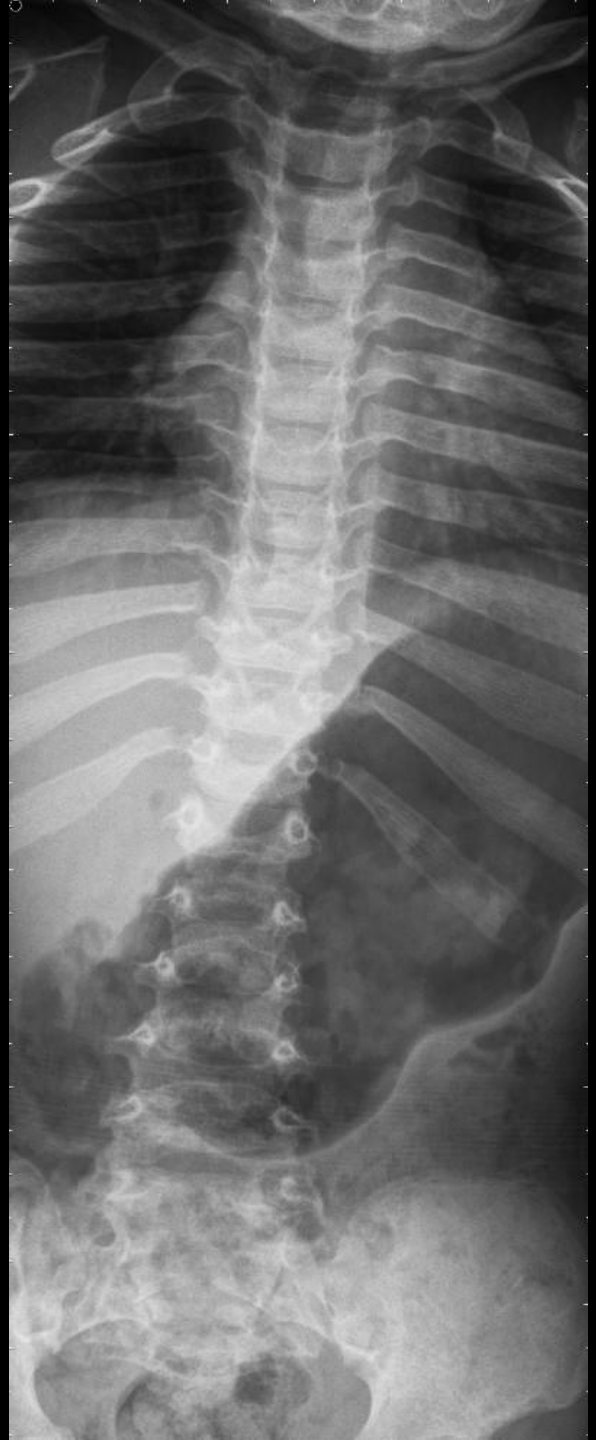
A24

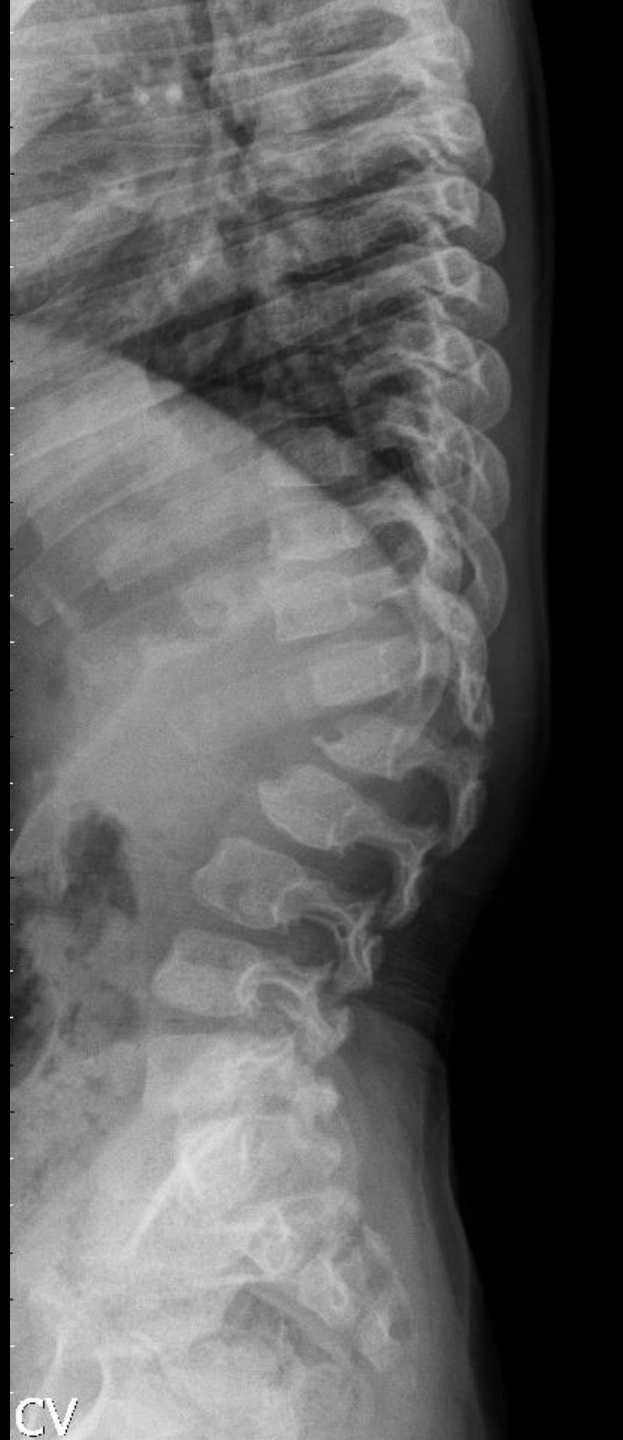
ANS： Pigmented villonodular synovitis

Q25

5 y/o boy, coarse face since birth





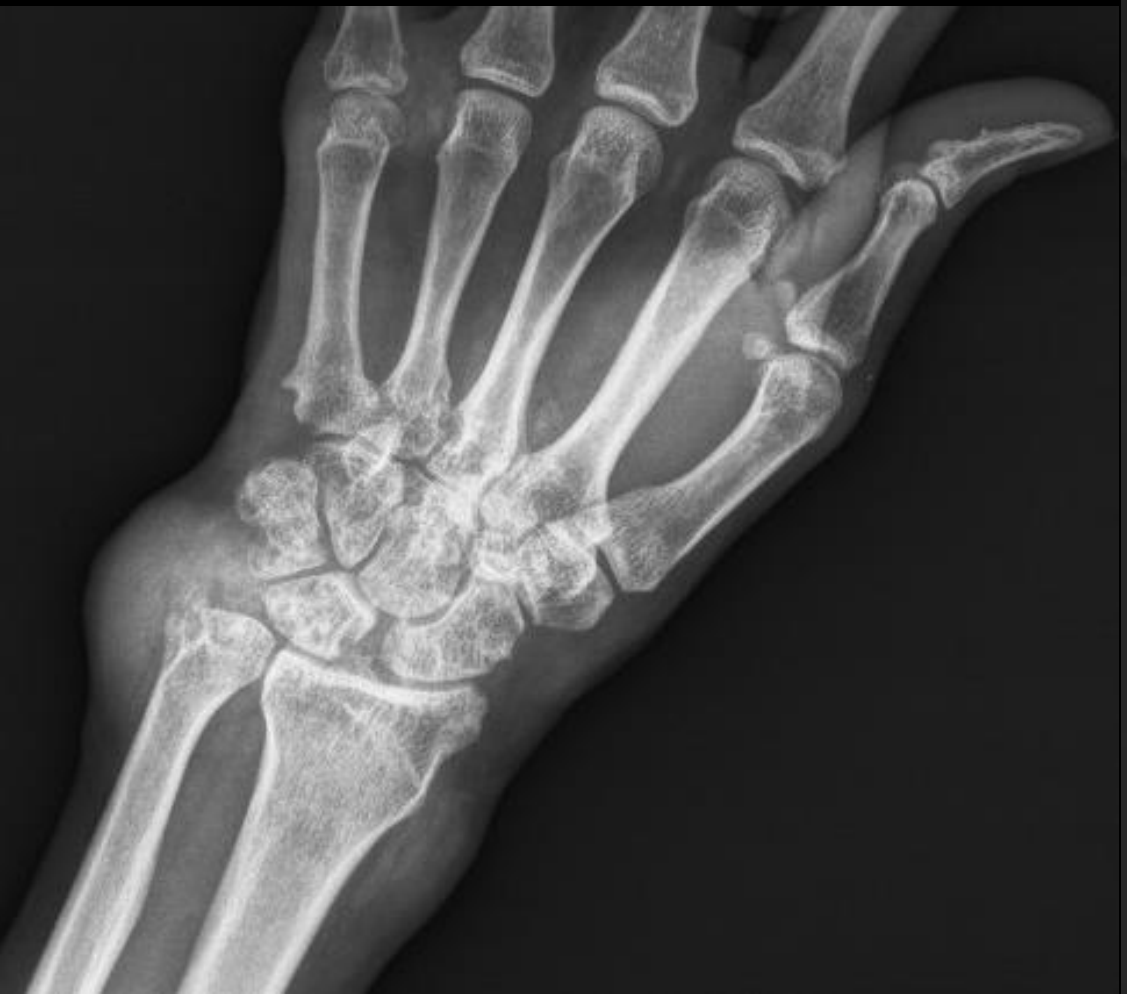


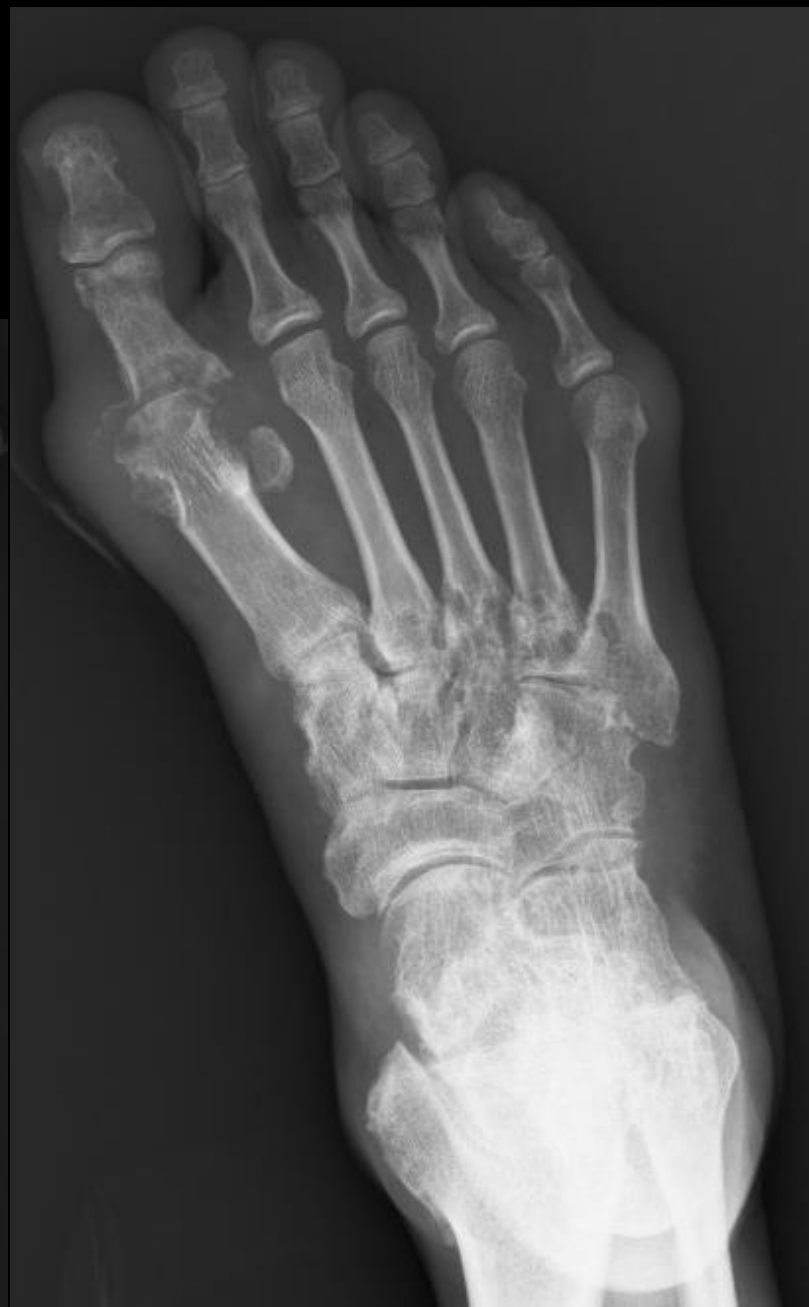
A25

ANS： Mucopolysaccharidosis type I
(MPS, type I ; Hurler's syndrome)

Q26

45 y/o male, CC: wrist pain and foot pain for a long time and several palpable masses



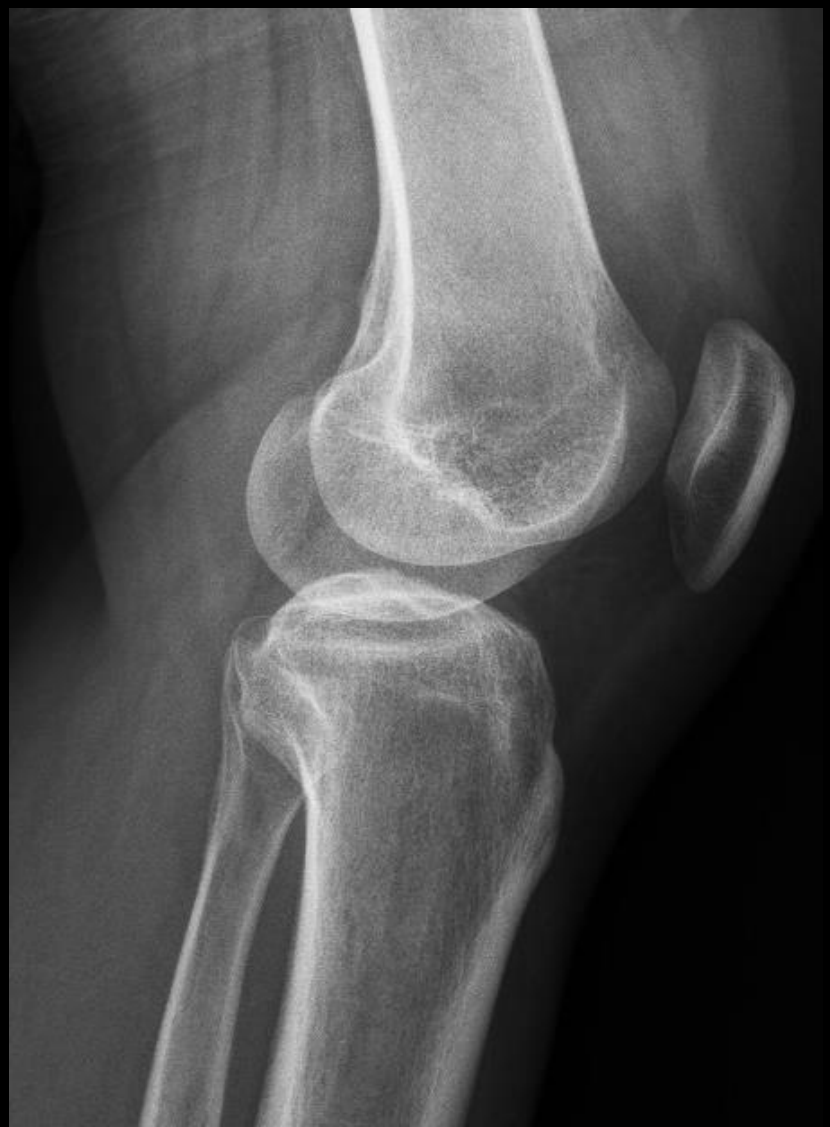


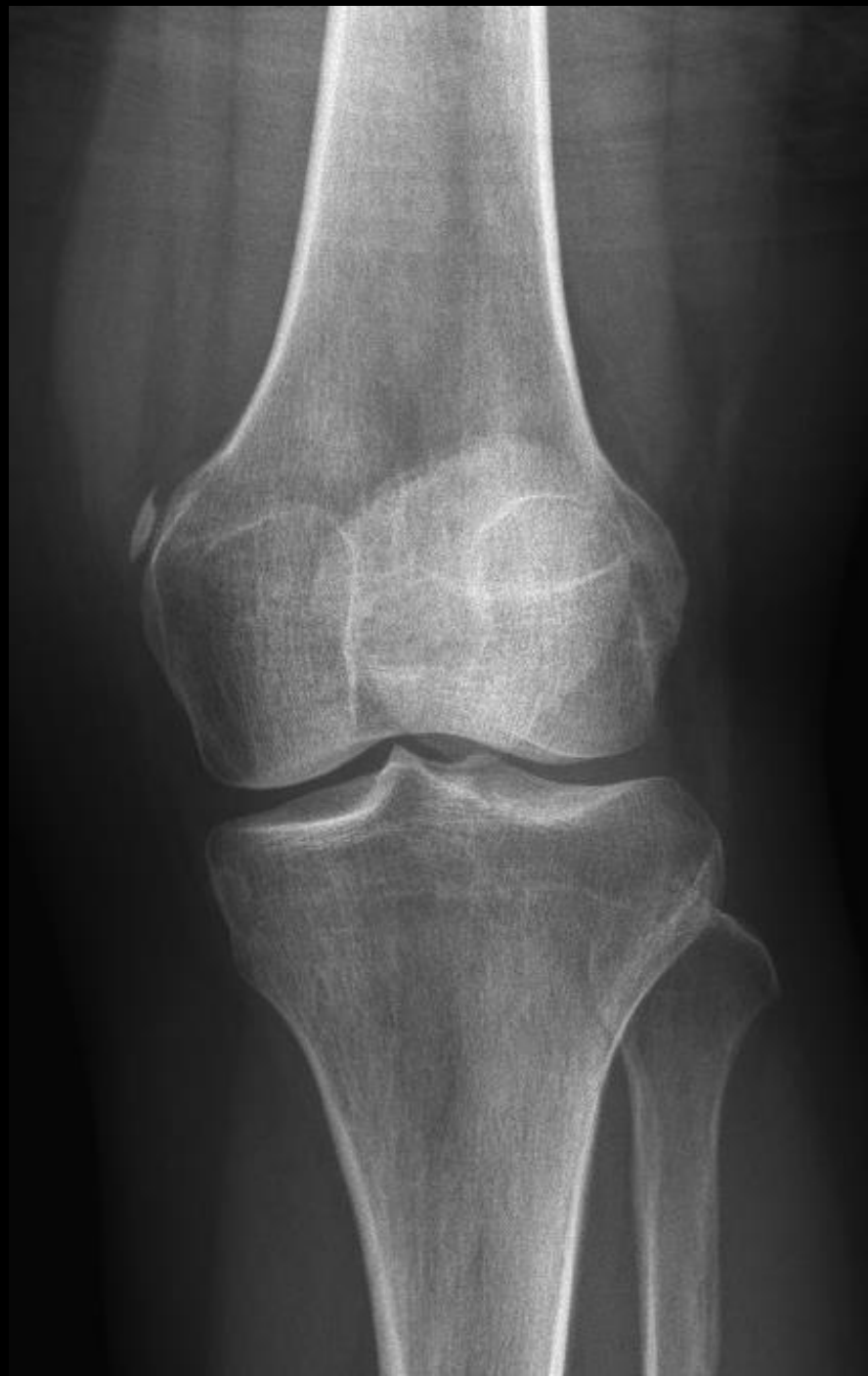
A26

ANS：Gouty arthritis

Q27

27y/o male, CC: knee pain for several weeks



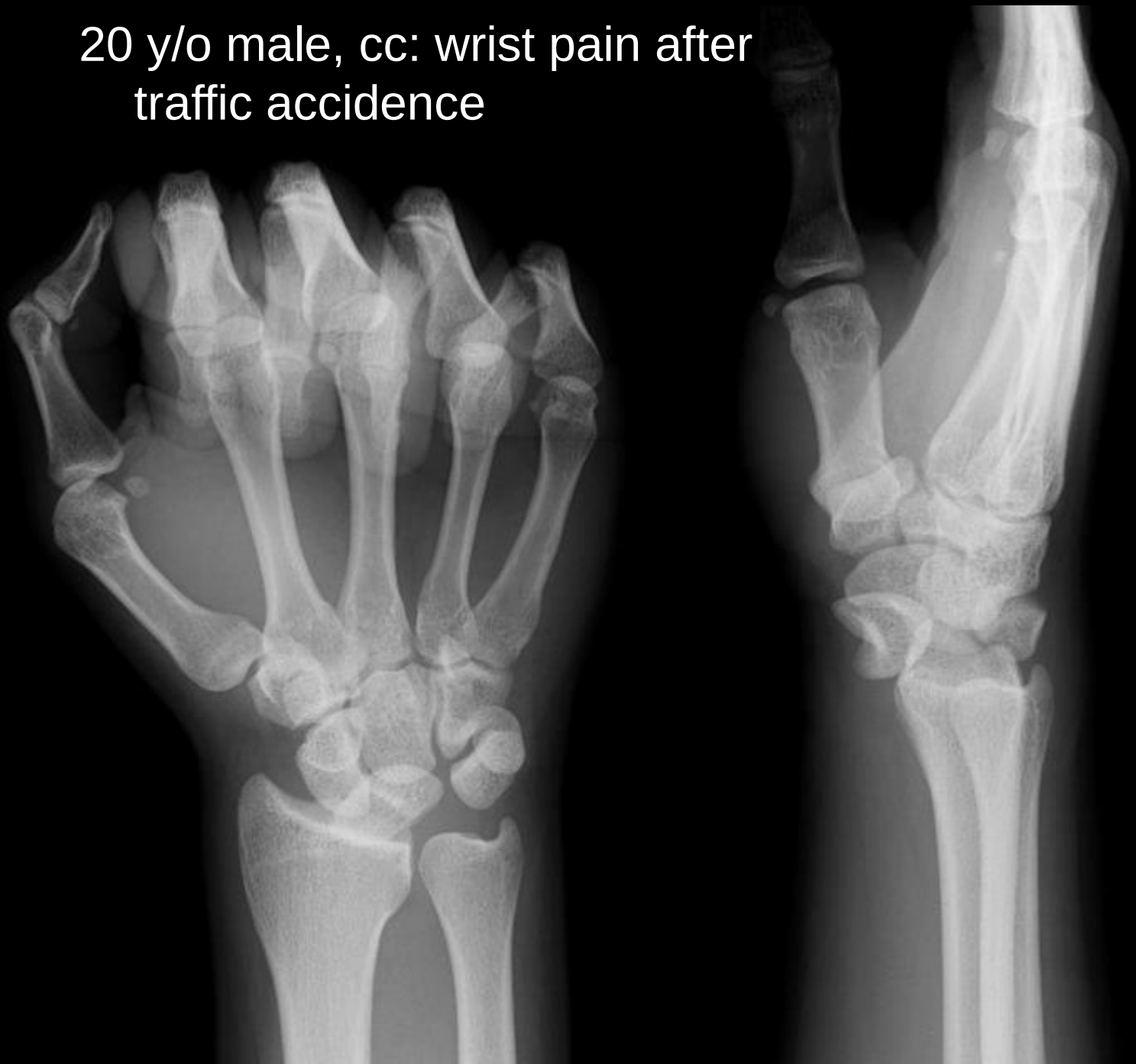


A27

ANS：Pellegrini Stieda disease

Q28

20 y/o male, cc: wrist pain after traffic accidence

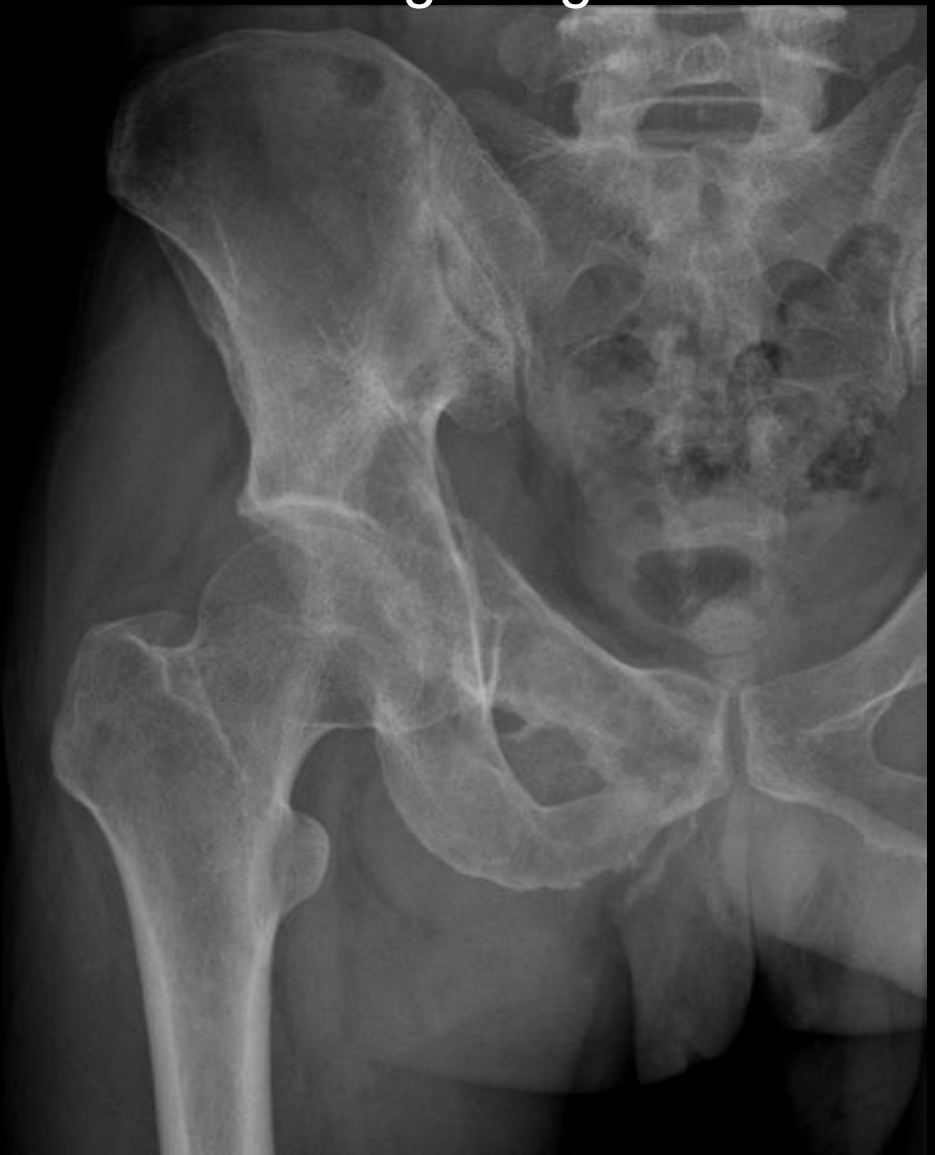


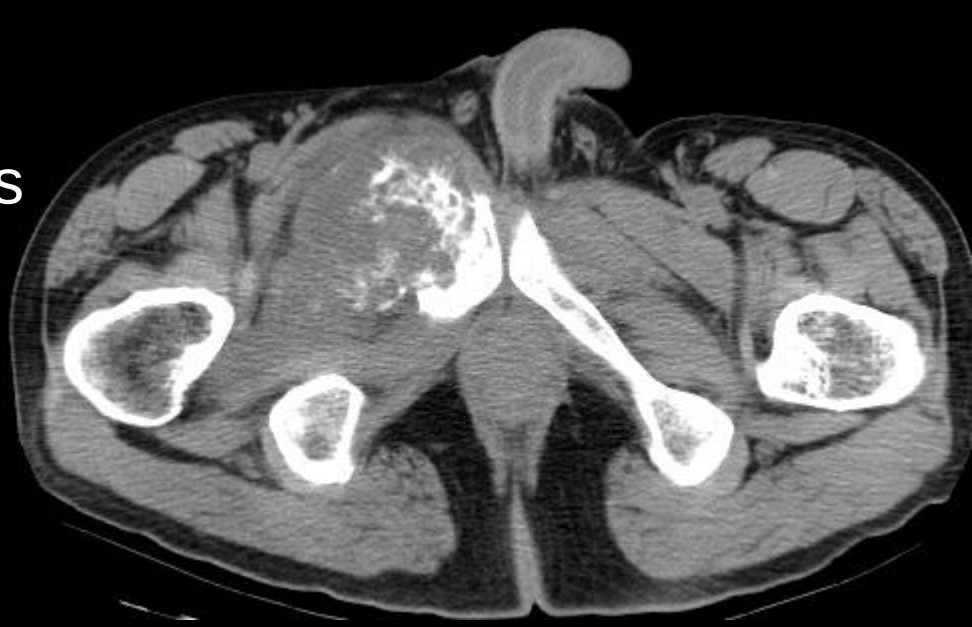
A28

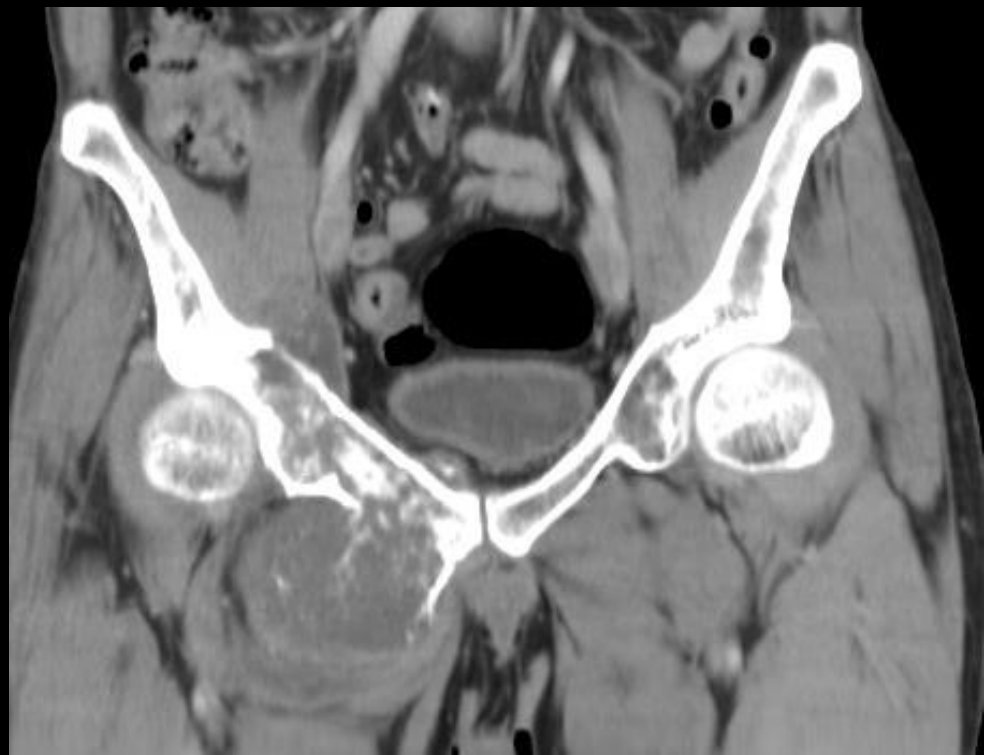
ANS：Lunate dislocation

Q29

60 y/o male, cc: right hip pain and palpable mass at right inguinal area





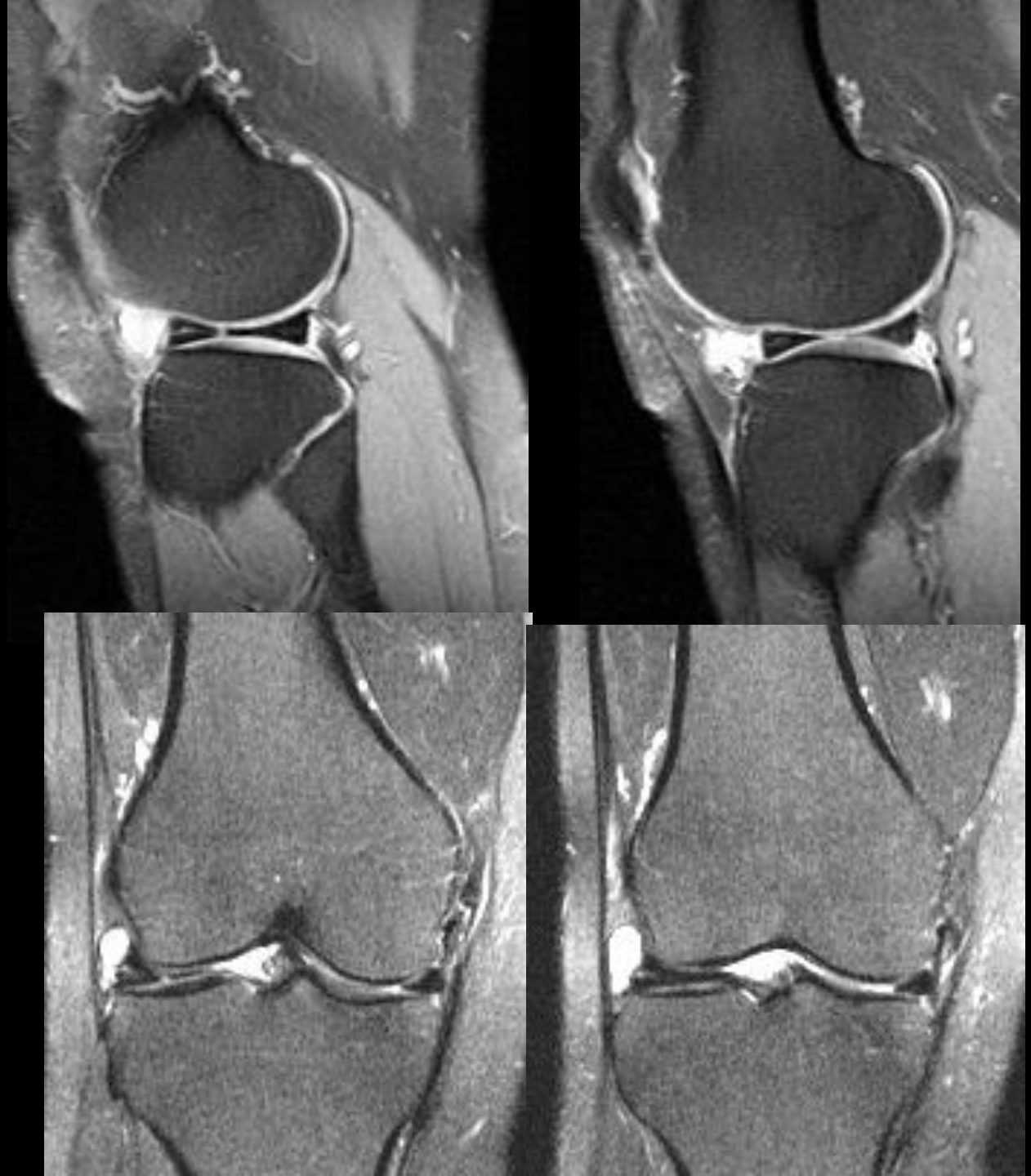


A29

ANS：Chondrosarcoma

Q30

18 y/o, cc: knee pain for several weeks



A30

ANS：

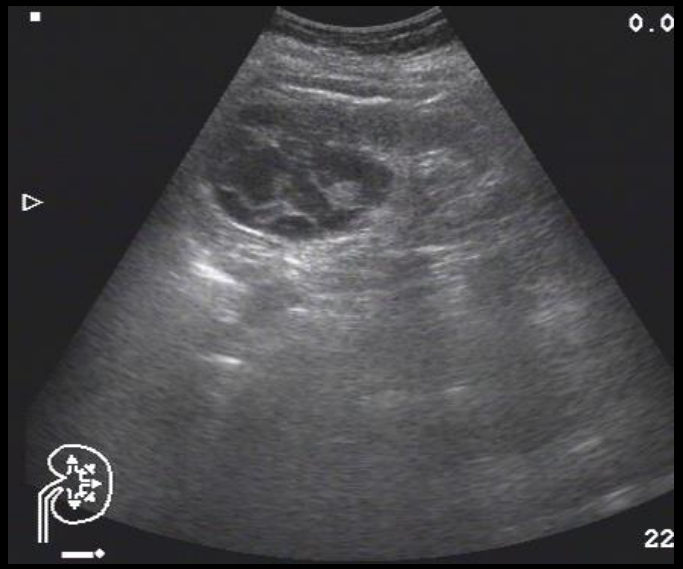
(1) Lateral meniscus tear (1分)

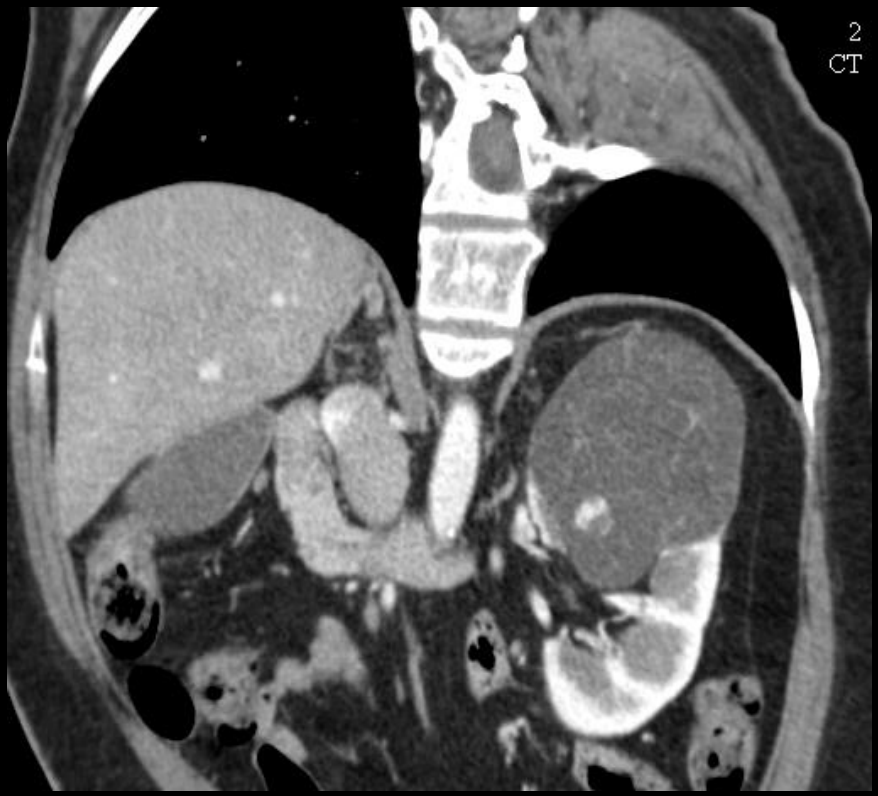
(2) parameniscal cyst (1分)

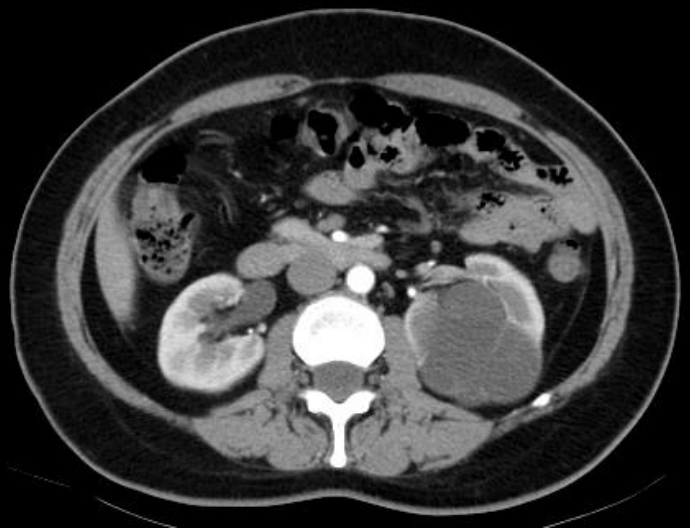
GU

Q31

56 y/o female
sonogram showed left renal tumor





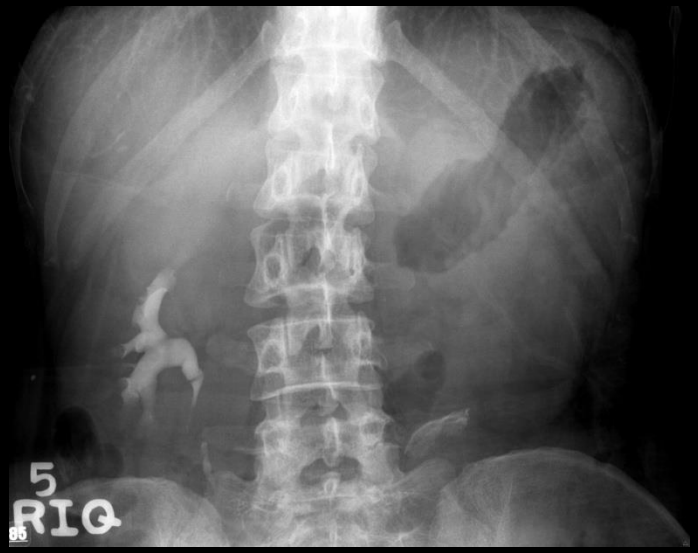


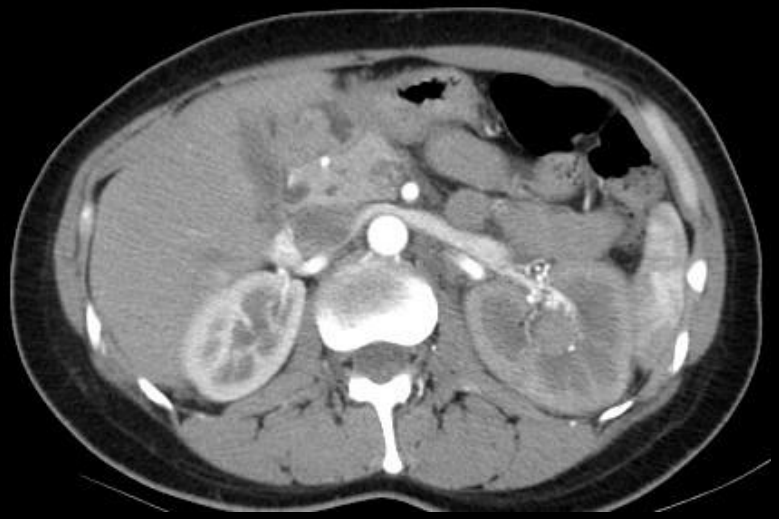
A31

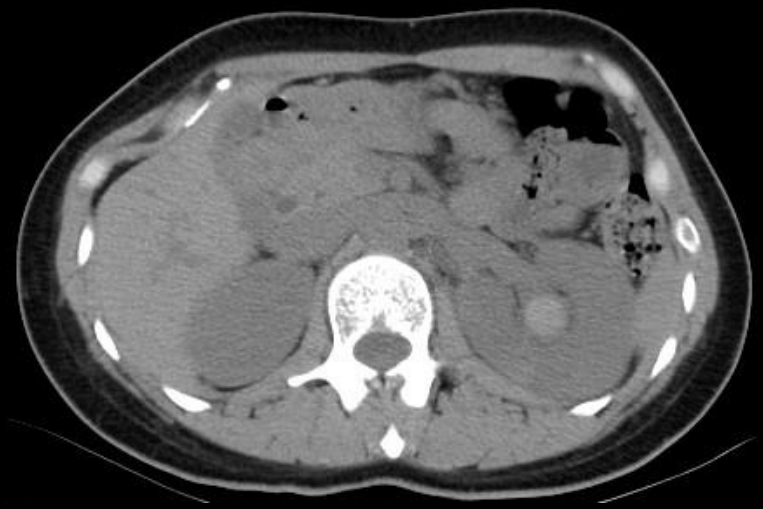
ANS：**Diagnosis: Multiloculated cystic nephroma**

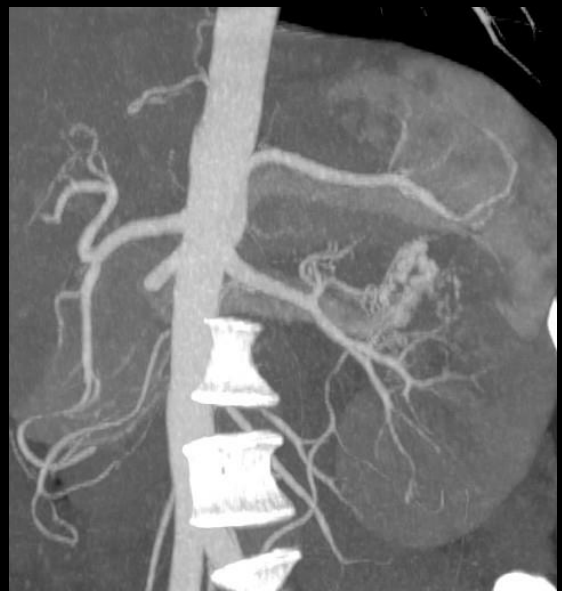
Q32

38 y/o female
gross hematuria for 2 days









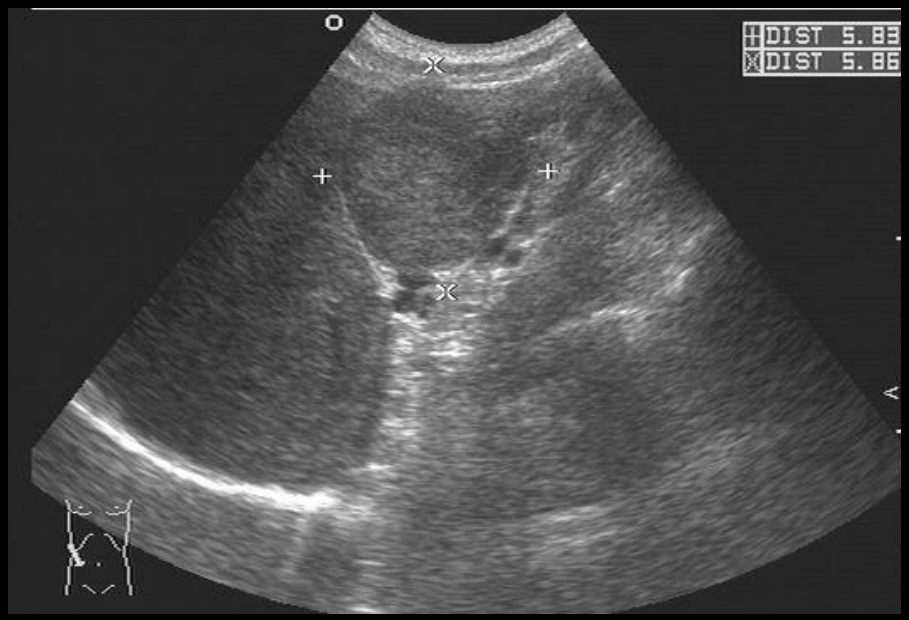
A32

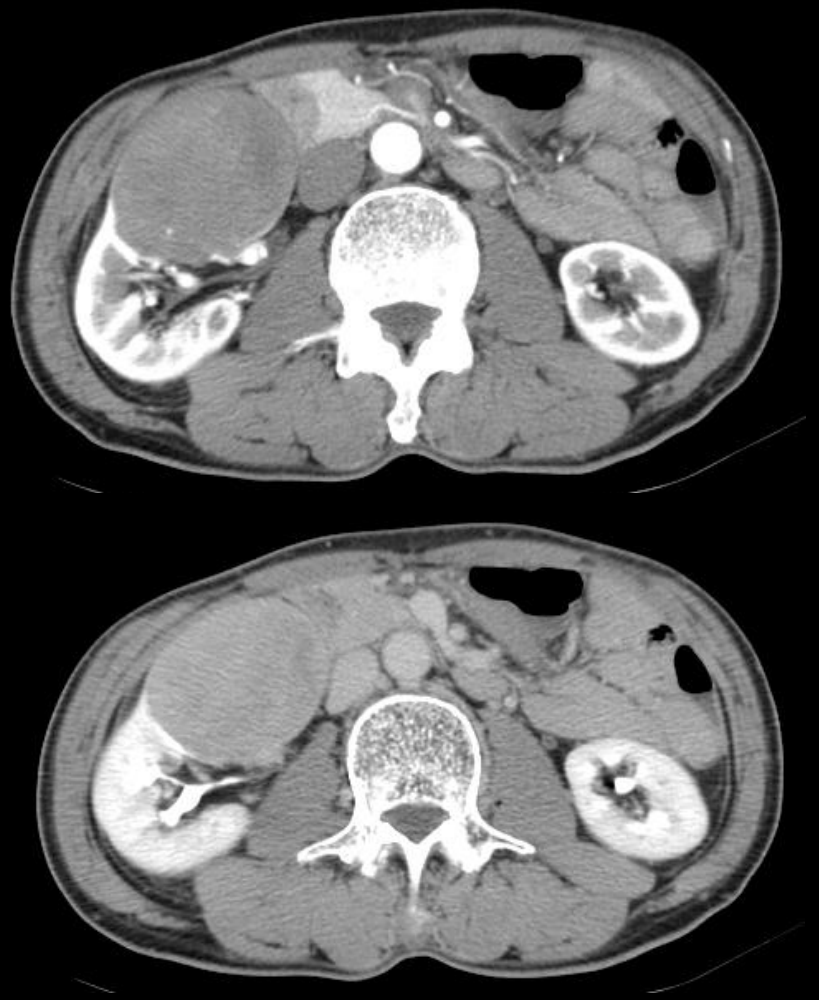
ANS： **Diagnosis: Renal arteriovenous malformation (AVM)**

Q33

69 y/o male

Right renal tumor noted in health examination





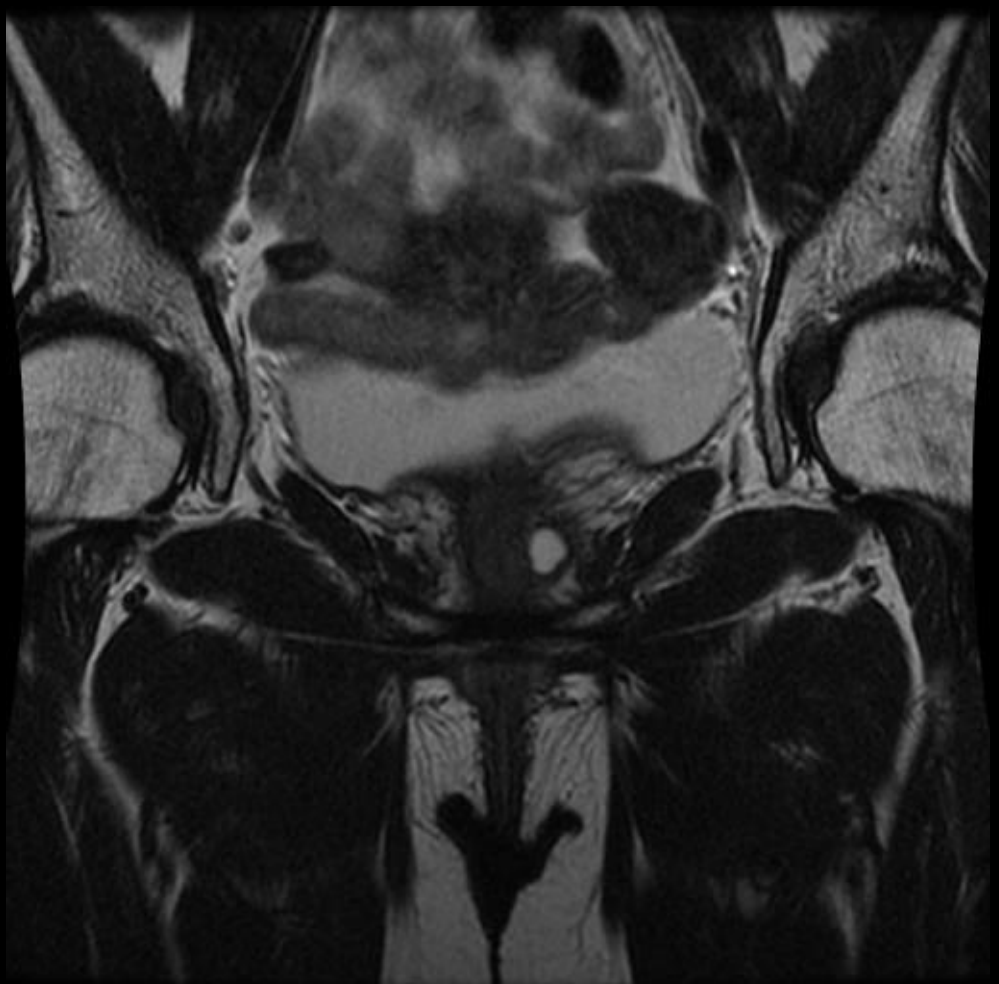
A33

ANS： **Diagnosis: Metanephric adenoma of right kidney**

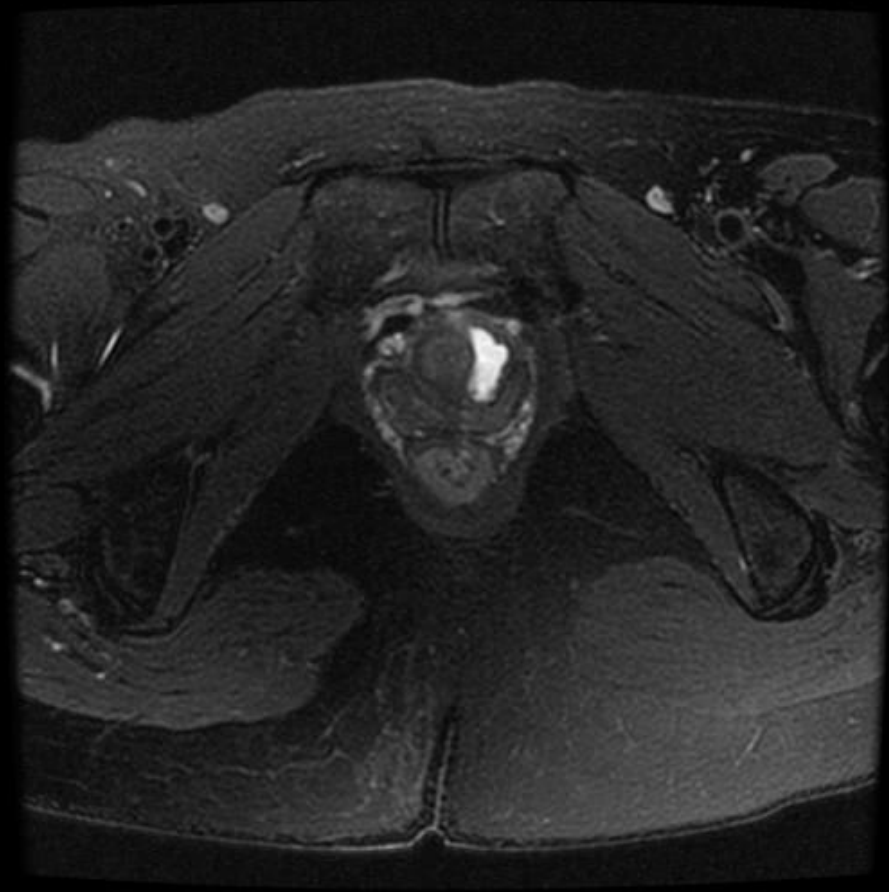
Q34

dragging sensation

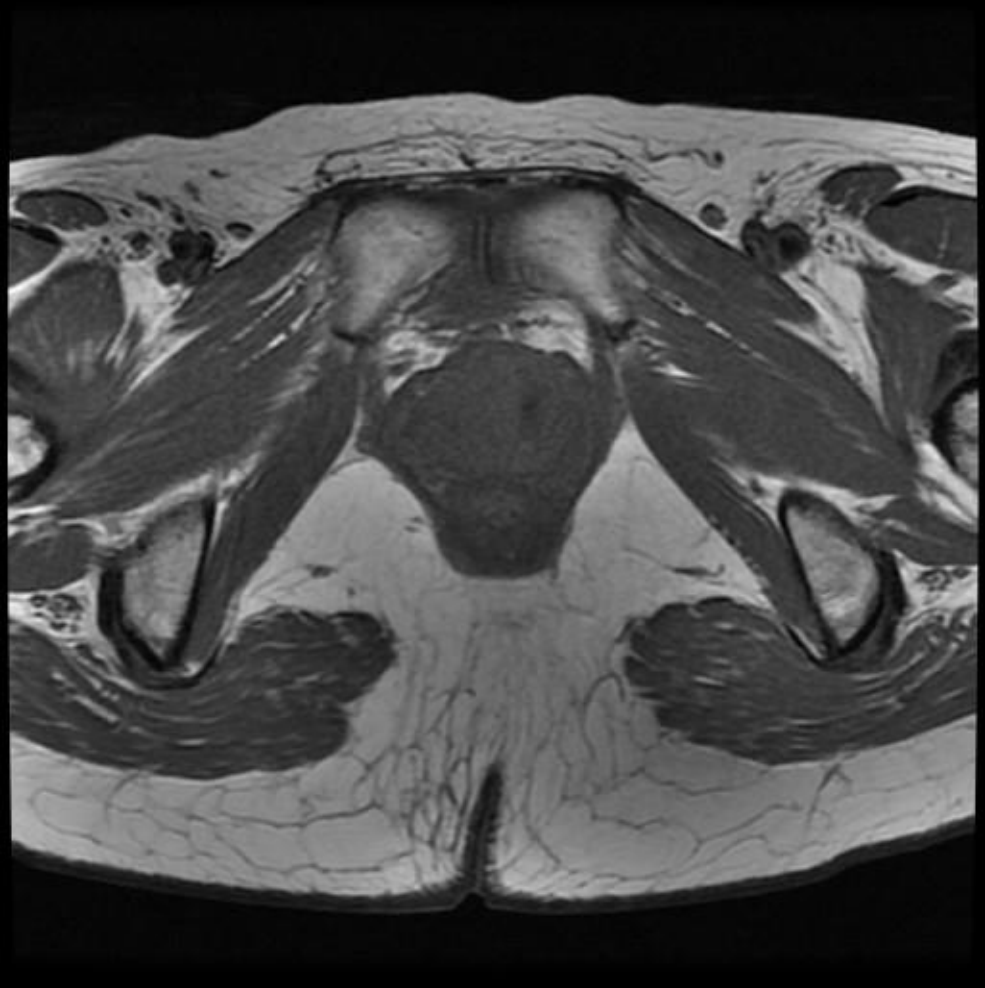
T2WI



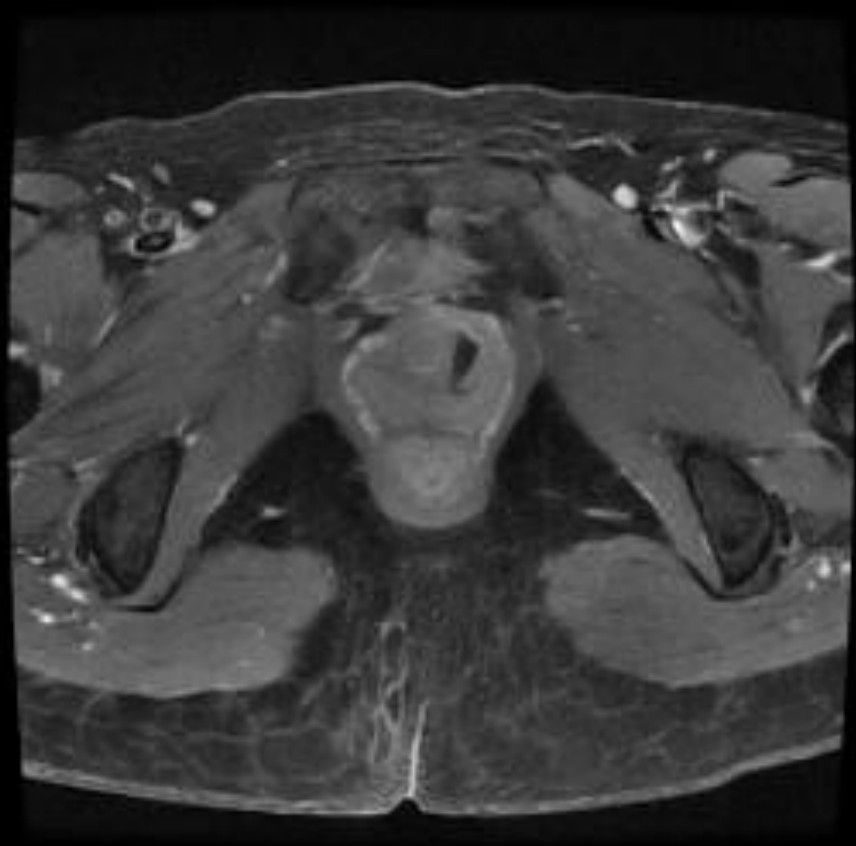
T2WI + F/S



T1WI



T1WI + Gd + F/S



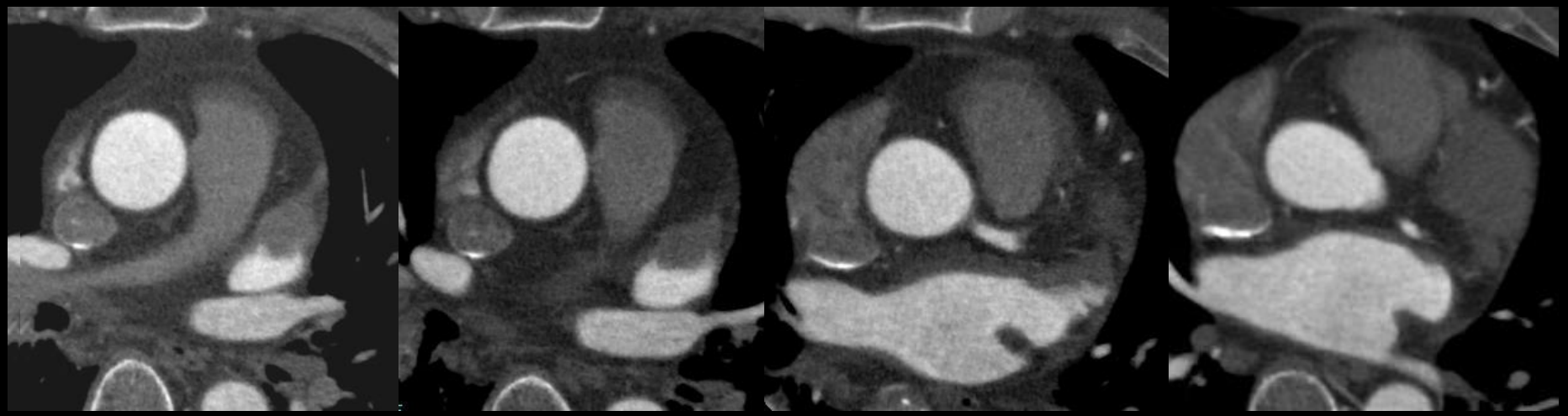
A34

ANS：periurethral cyst

CV

Q35

55 y/o male, chest tightness for months



Coronary CTA

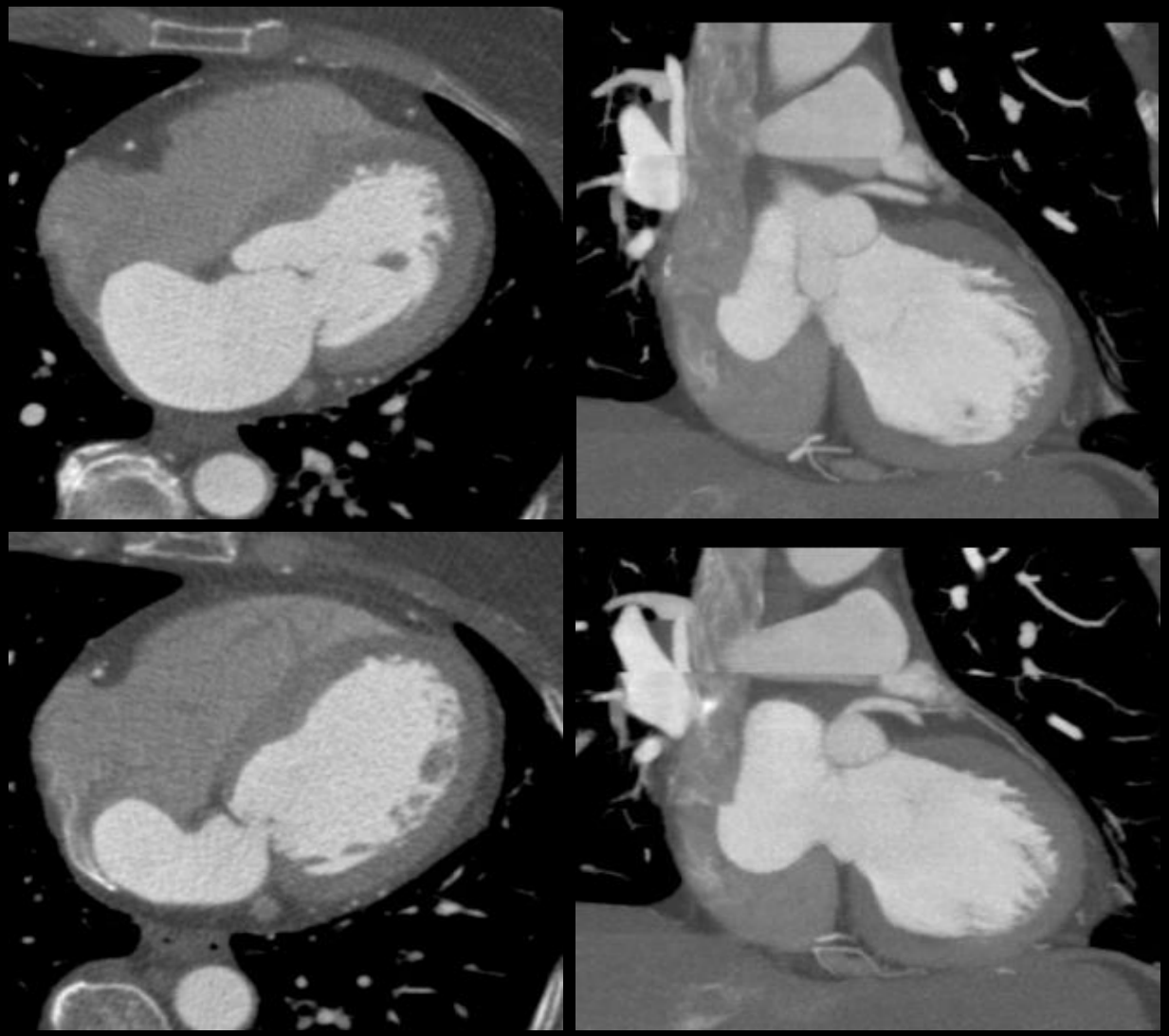
A35

ANS：Left atrial appendage thrombus
Atrial fibrillation

Q36

61 y/o female

What is the abnormality between right atrium and left atrium ?



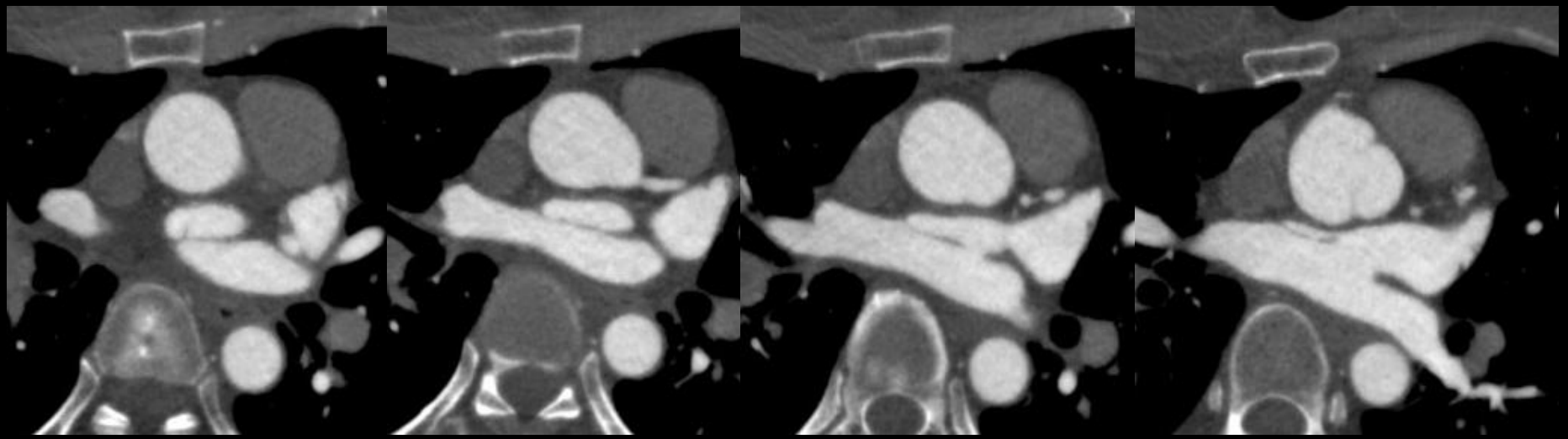
A36

ANS：Atrial septal aneurysm

Q37

44 y/o female

What is the congenital abnormality in left atrium ?

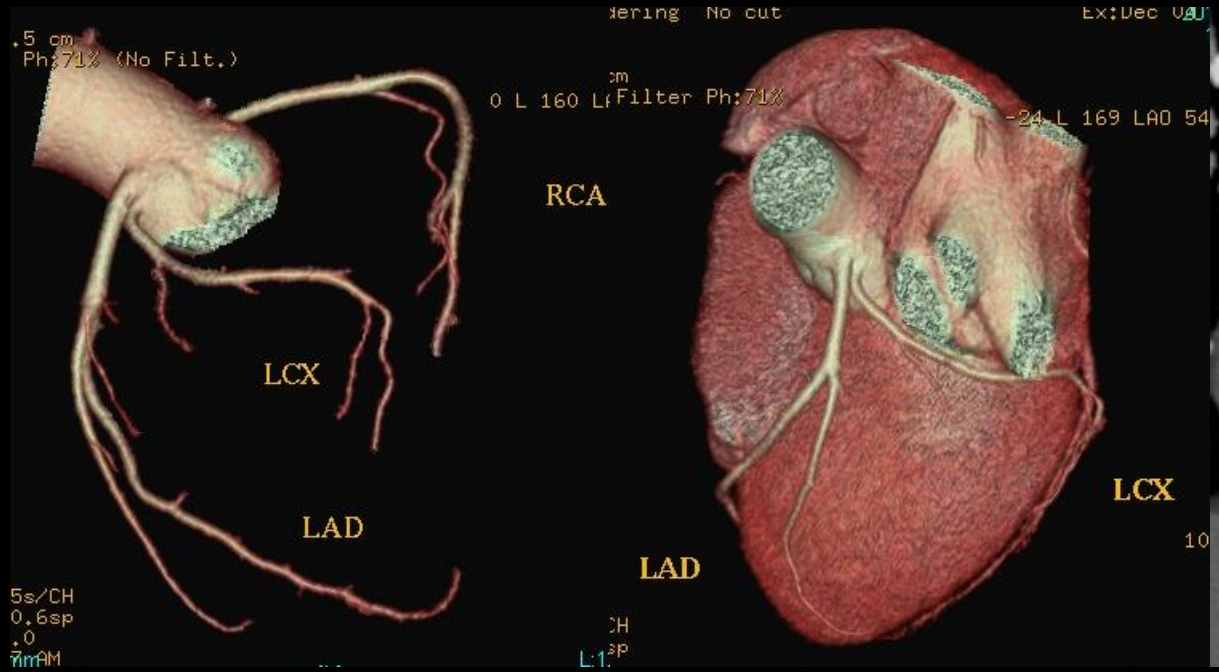


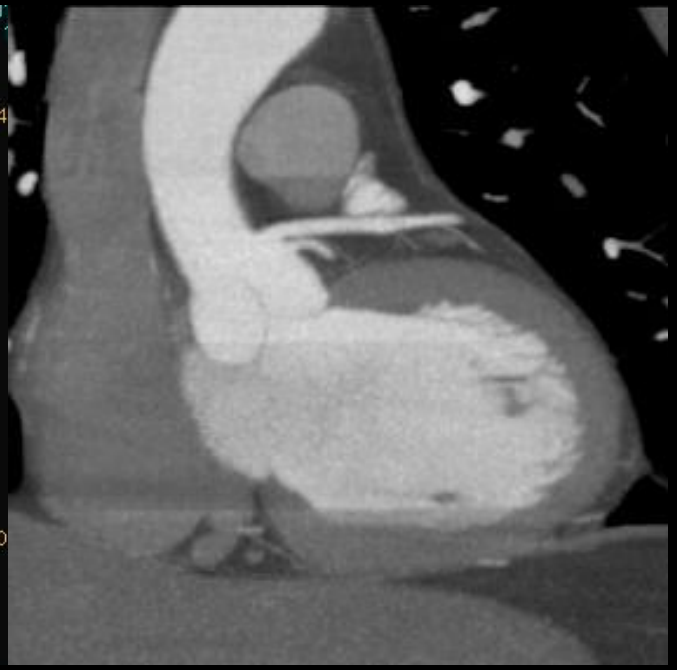
A37

ANS：Cor triatriatum

Q38

48 y/o male, coronary CTA for health examaination
What is the congenital abnormality ?





A38

ANS：Separate ostia of left anterior descending coronary artery (LAD) and left circumflex coronary artery (LCX) in left aortic sinus of Valsalva

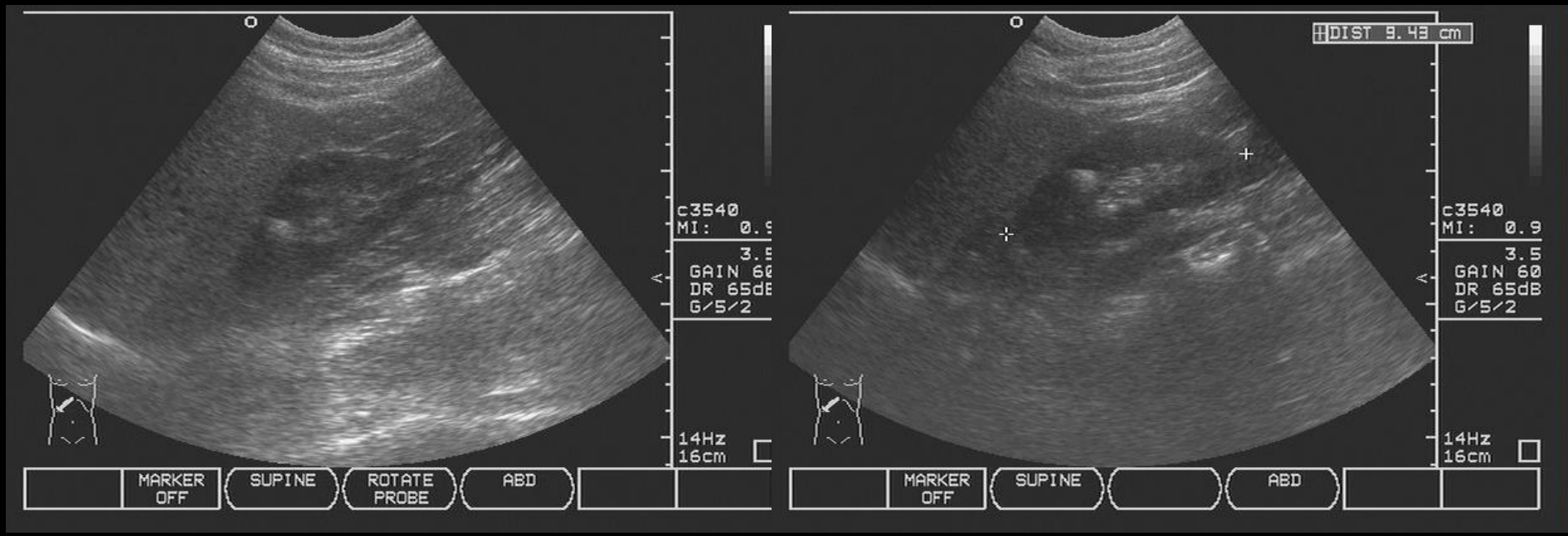
SN

Q39

性別：Female

年齡：68 y/o

主訴：Annual follow-up post breast cancer operation



A39

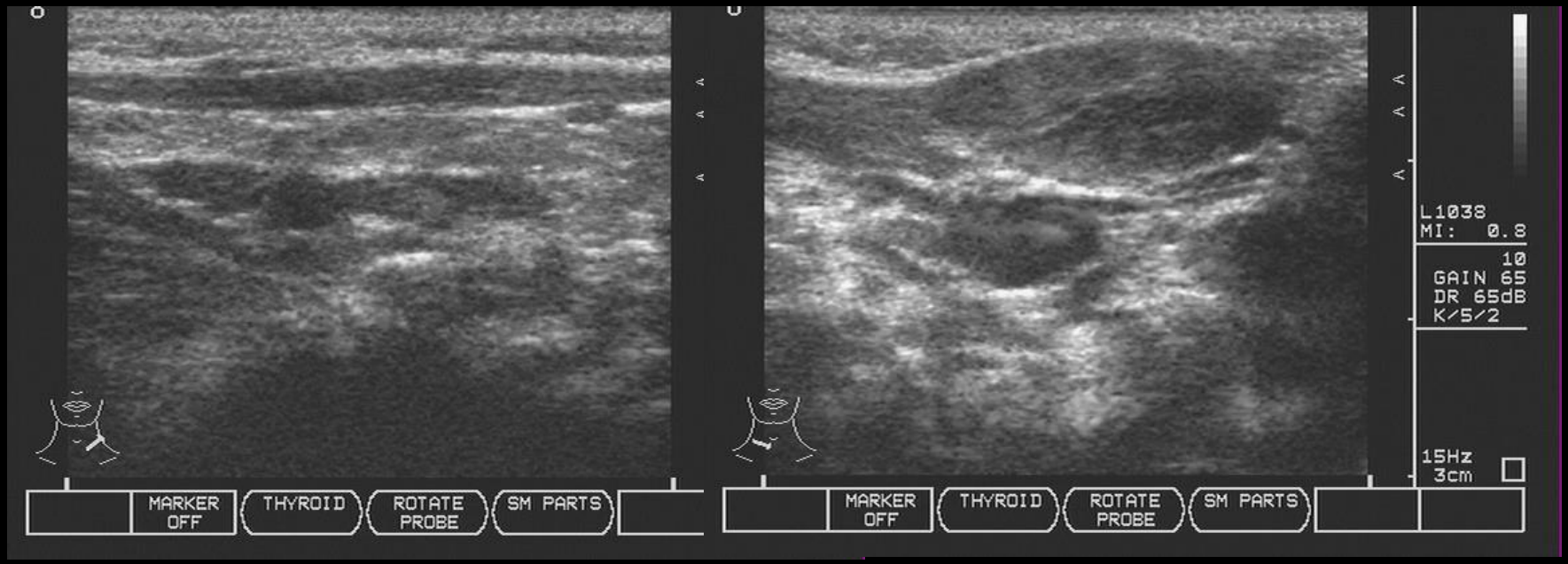
ANS：Calyceal diverticulum with milk of calcium in the upper pole of right kidney

Q40

性別：Female

年齡：5 m/o

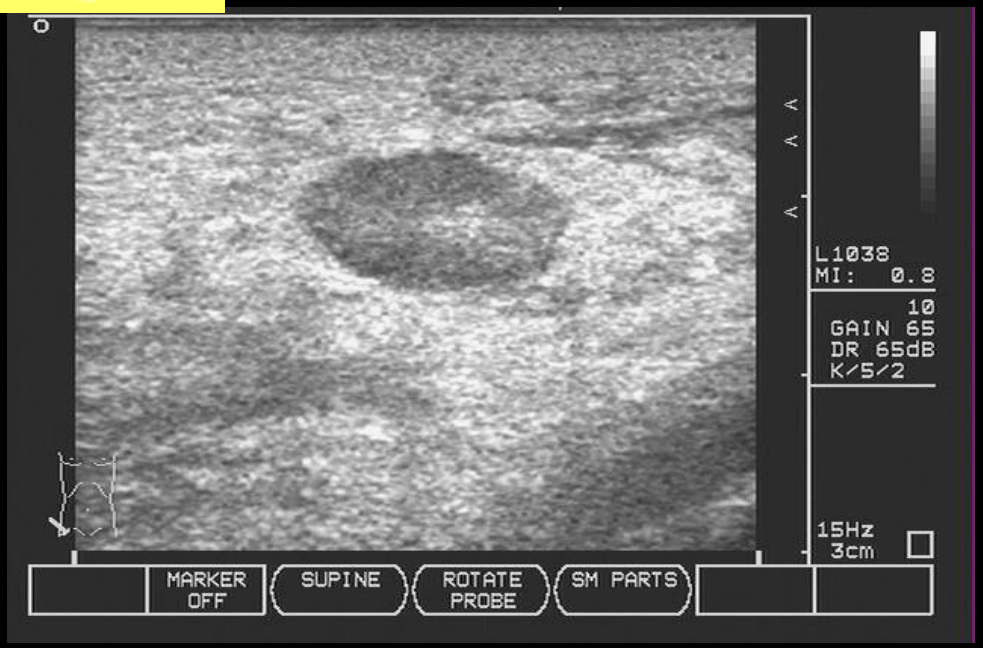
主訴：Right neck mass since birth



A40

ANS：Right muscular torticollis

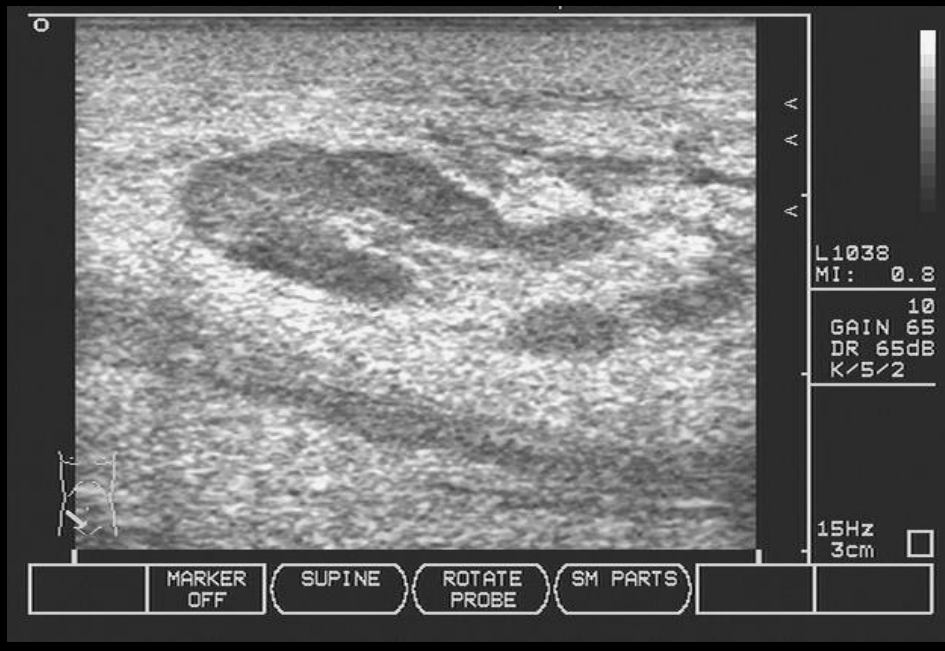
Q41

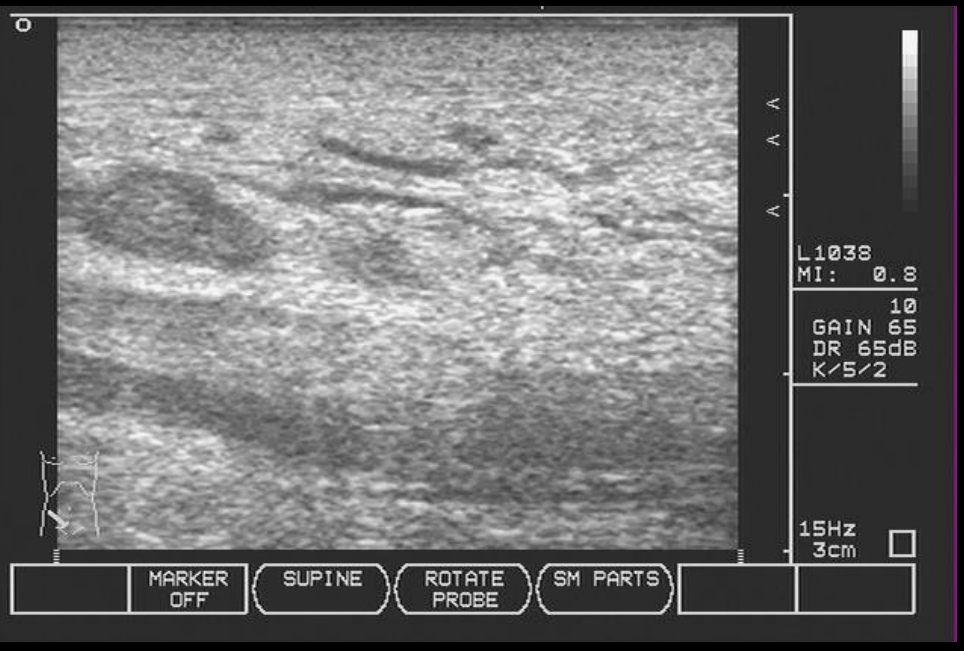


性別：Female

年齡：31 y/o

主訴：Right inguinal painful swelling



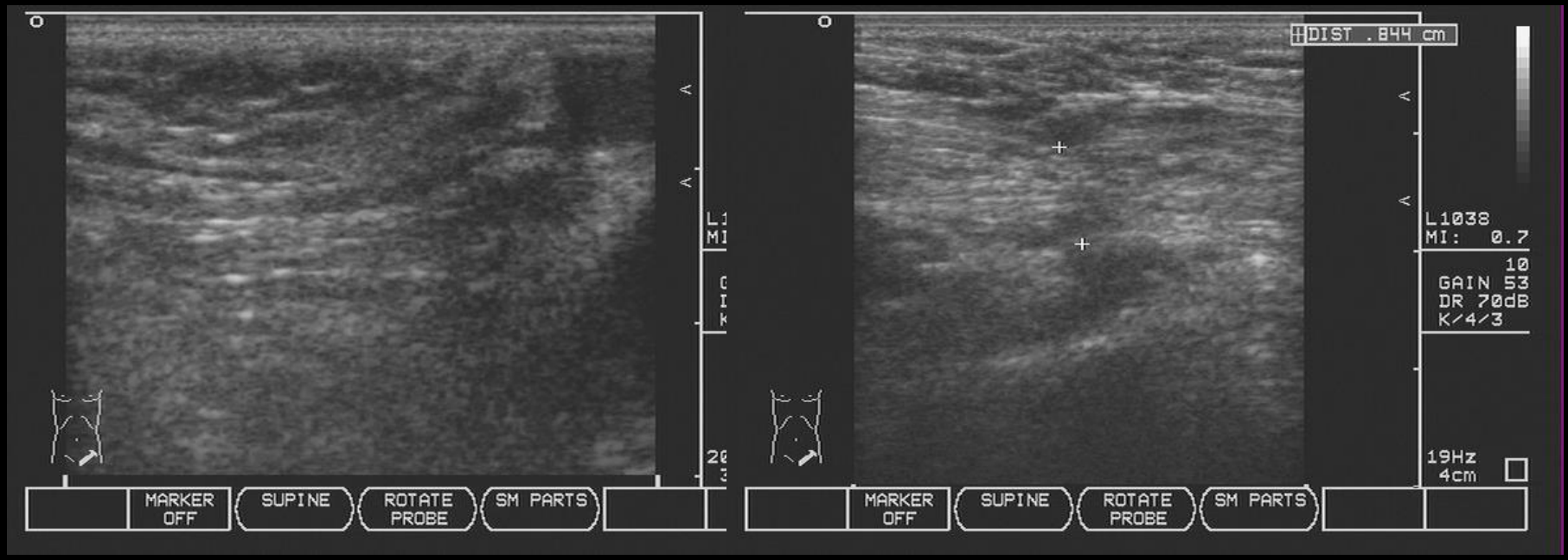


A41

ANS：Cellullitis with minimal abscess and Multiple lymphadenopathy

Q42

性別：Male
年齡：5 y/o
主訴：Left inguinal mass



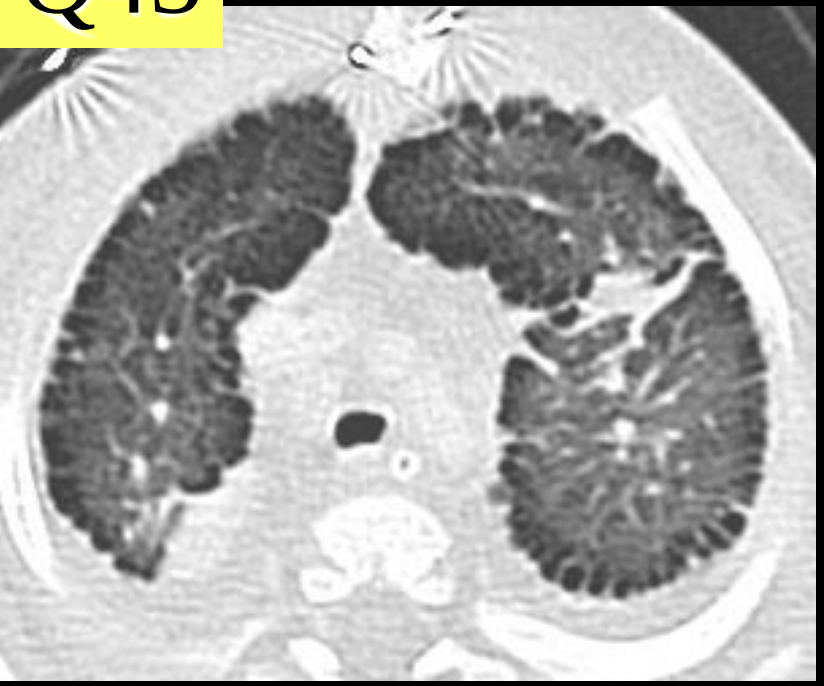
A42

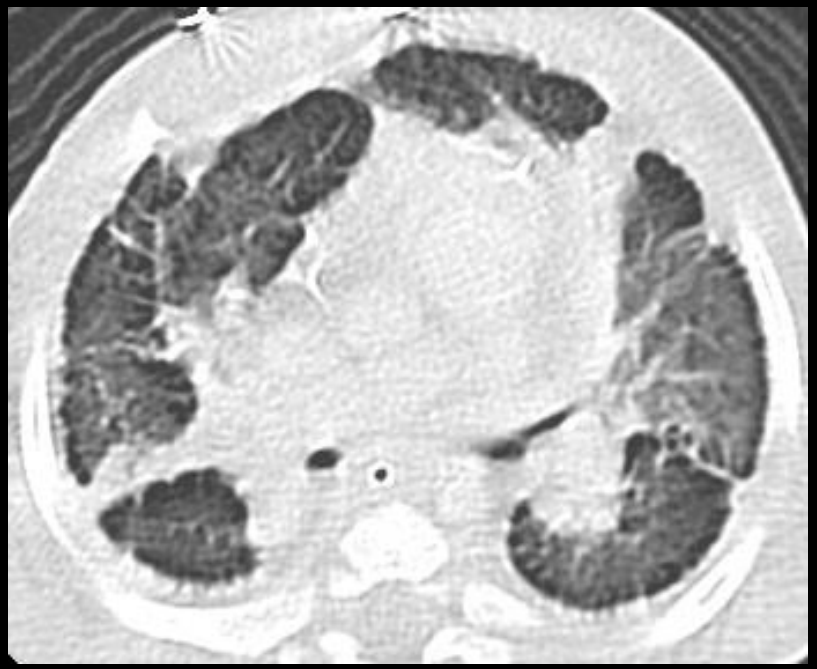
ANS： Left mesentery-content inguinal herniation sac

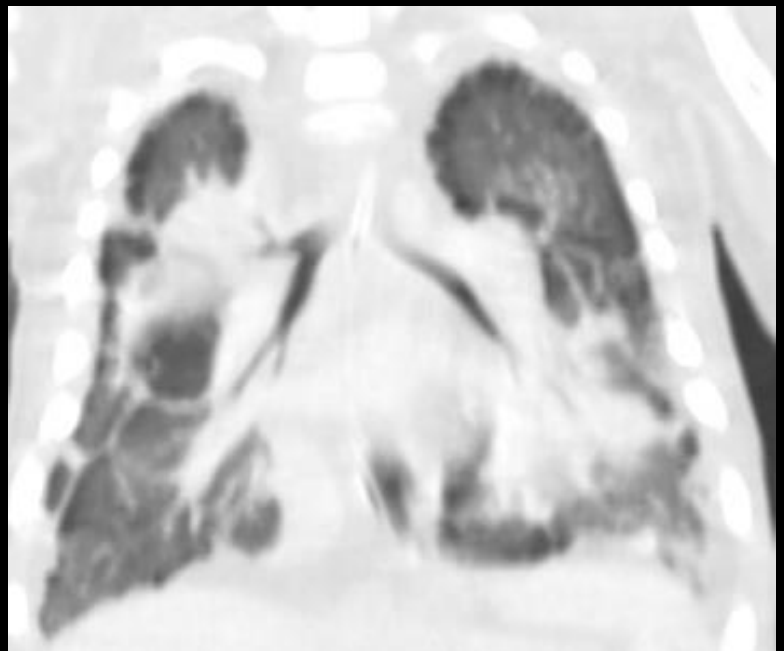
PE

Q43

male, 6 months old, dyspnea





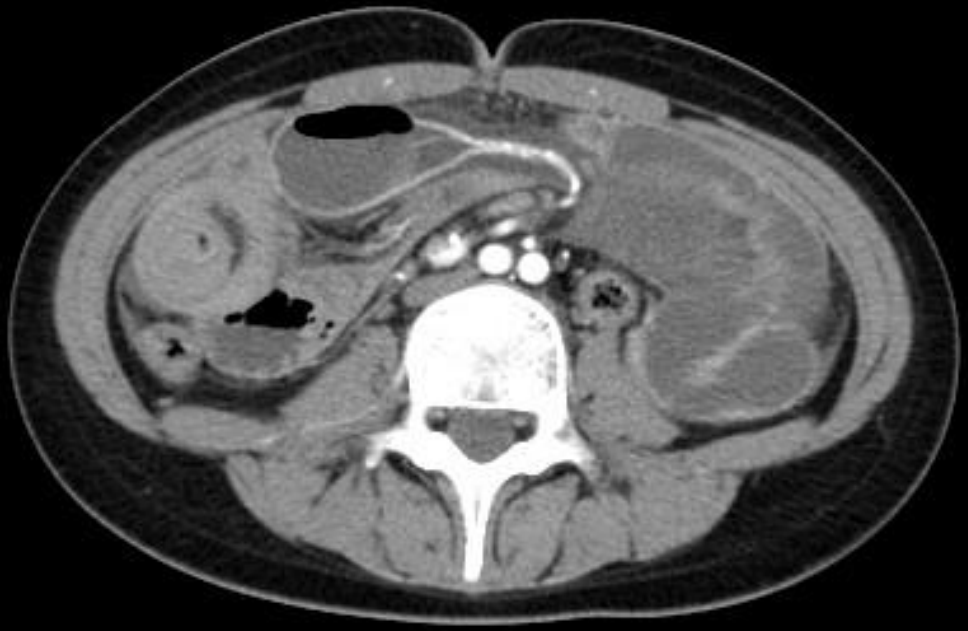


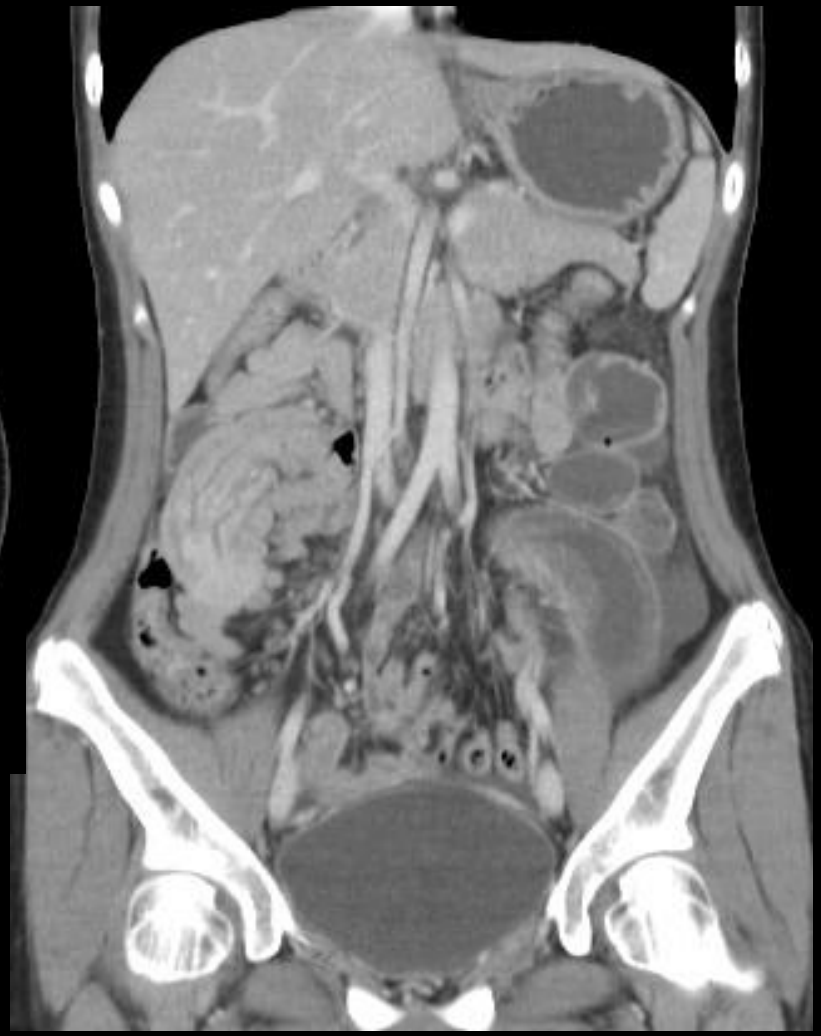
A43

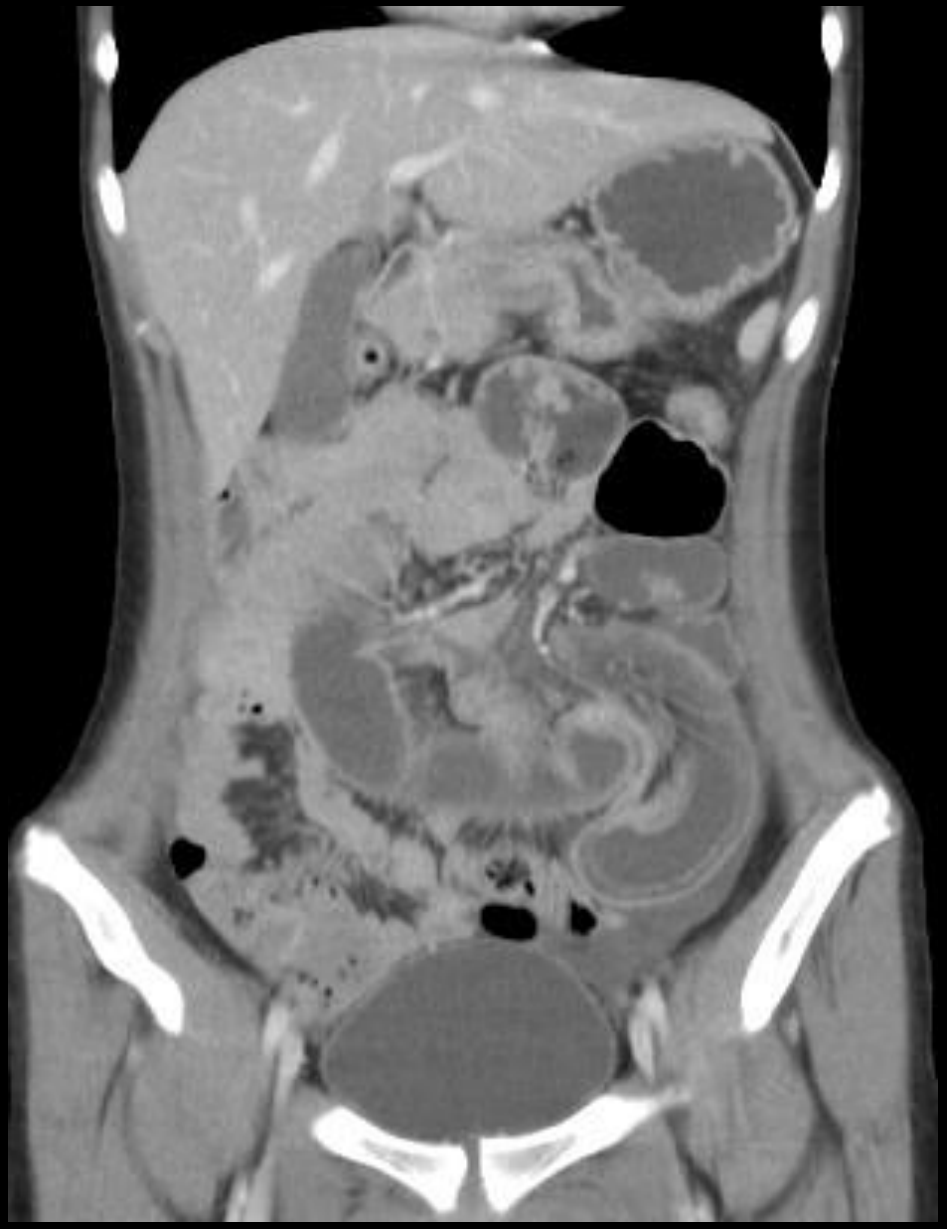
ANS：CCAM (congenital cystic adenomatoid malformation), type II

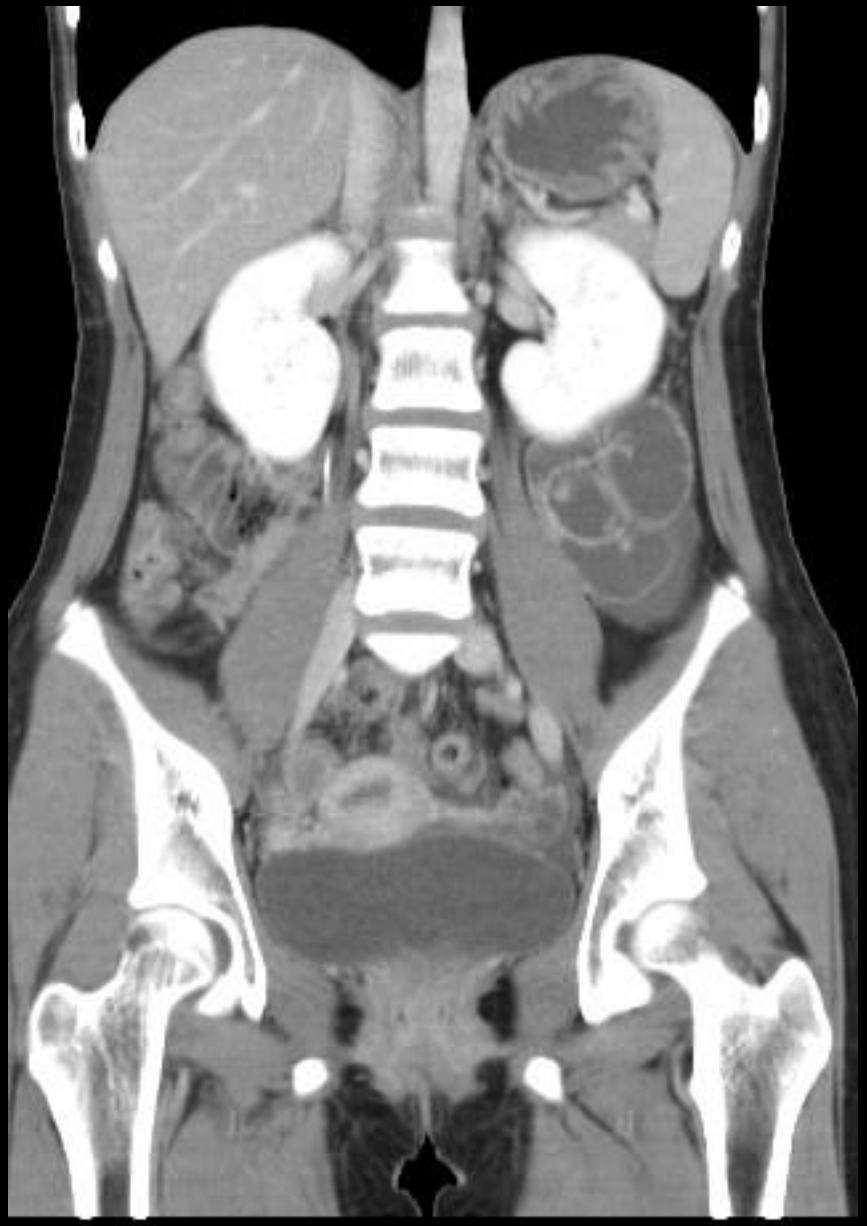
Q44

female, 13 yrs old,
epigastric pain







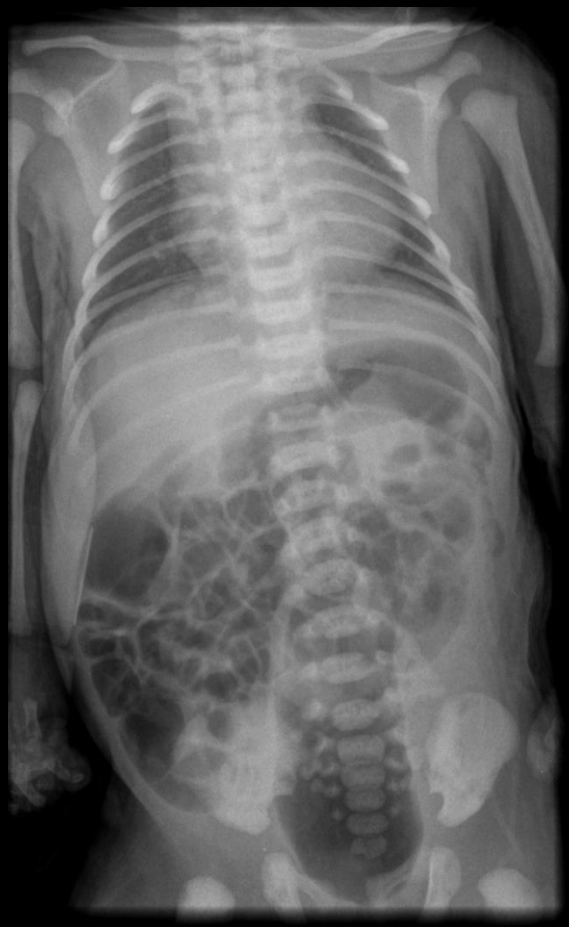


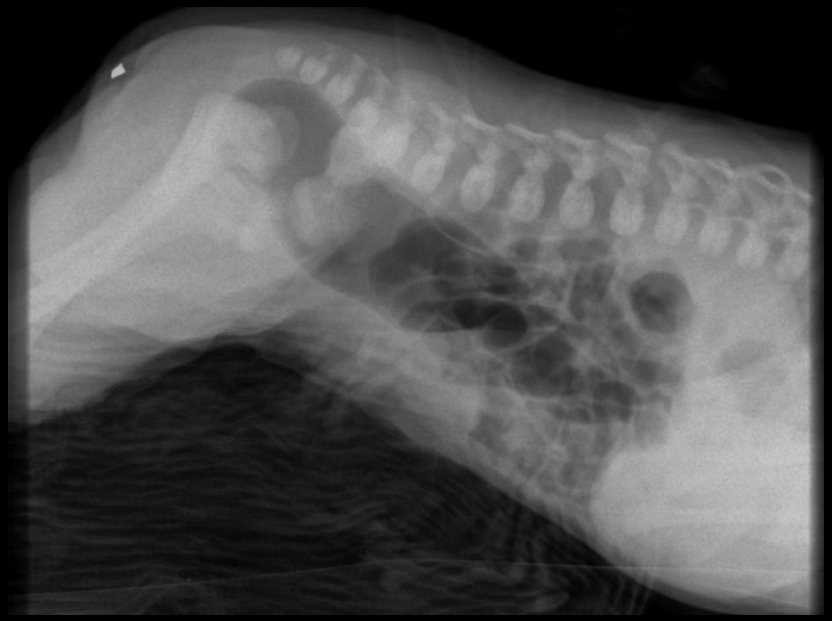
A44

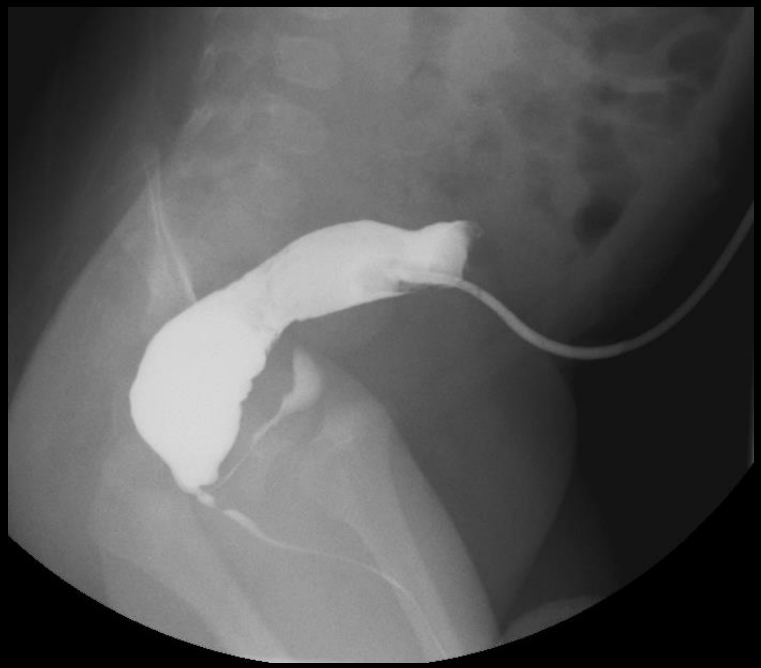
ANS：Peutz–Jeghers syndrome

Q45

male, 1 yrs old





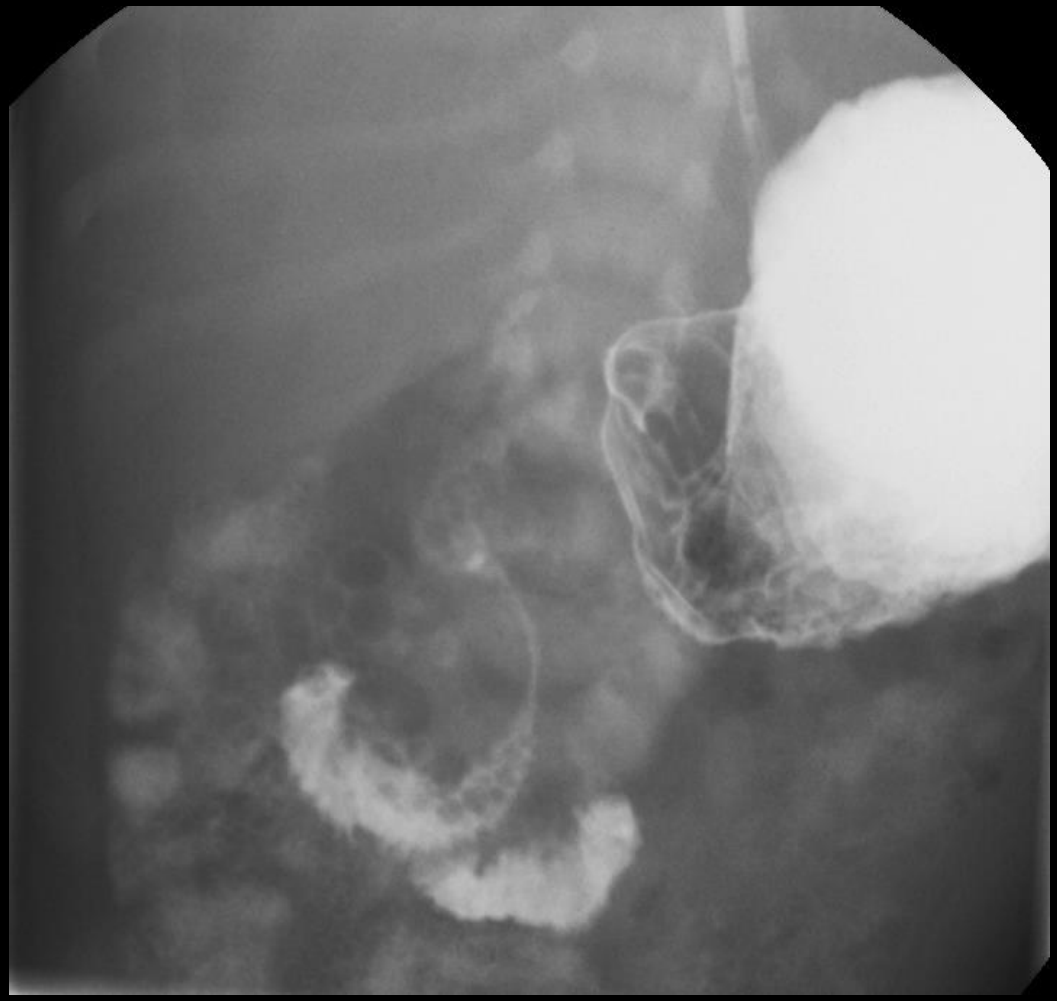


A45

ANS： imperforate anus with rectourethral fistula

Q46

male, 1 yrs old, vomiting



A46

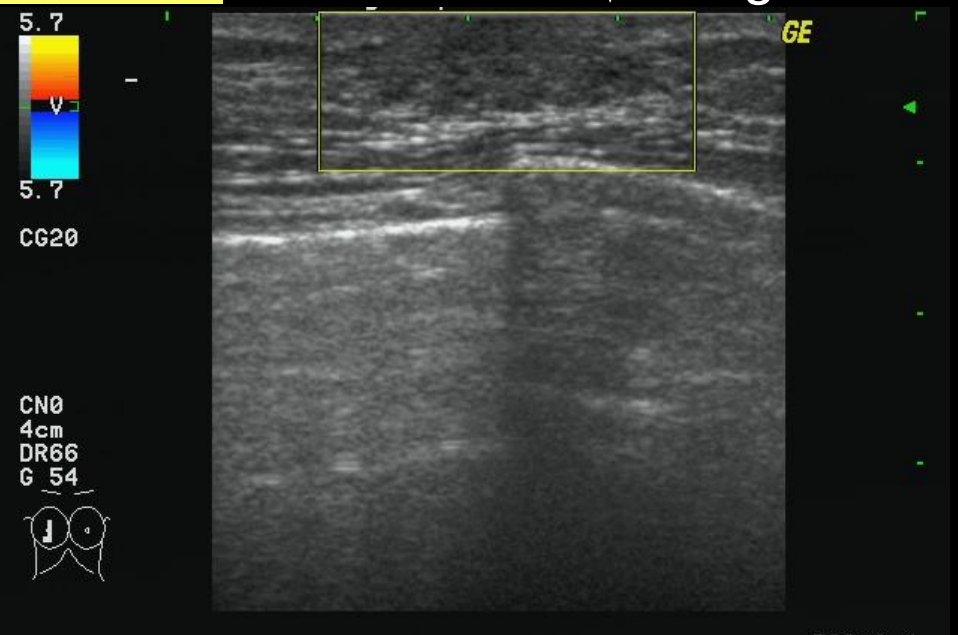
ANS： duodenal malrotation

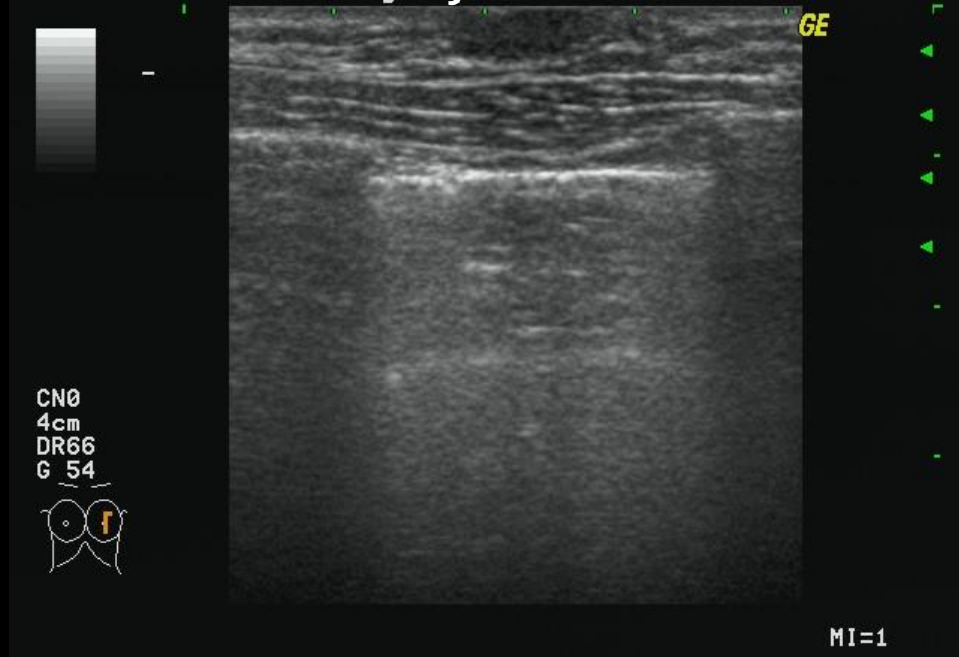
BR

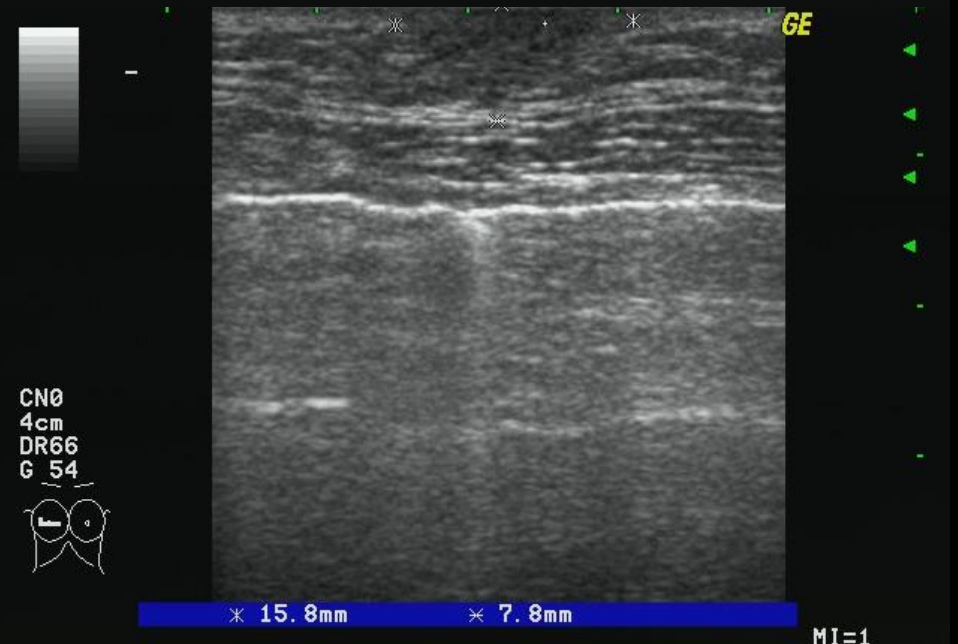
Q47

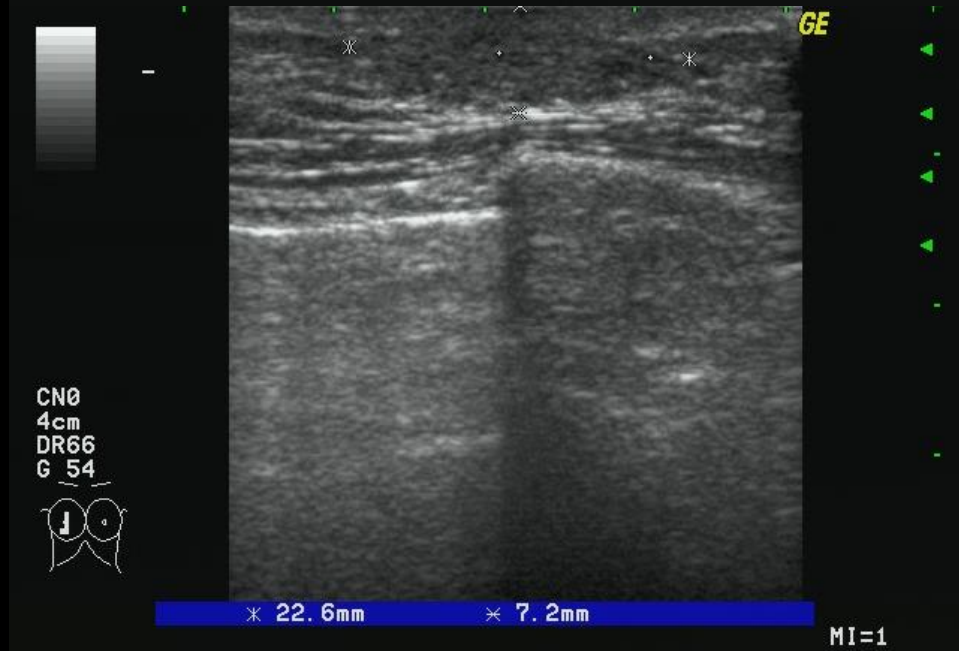
性別：Male　　年齡：69 y/o

主訴：Right breast mass for 10 days









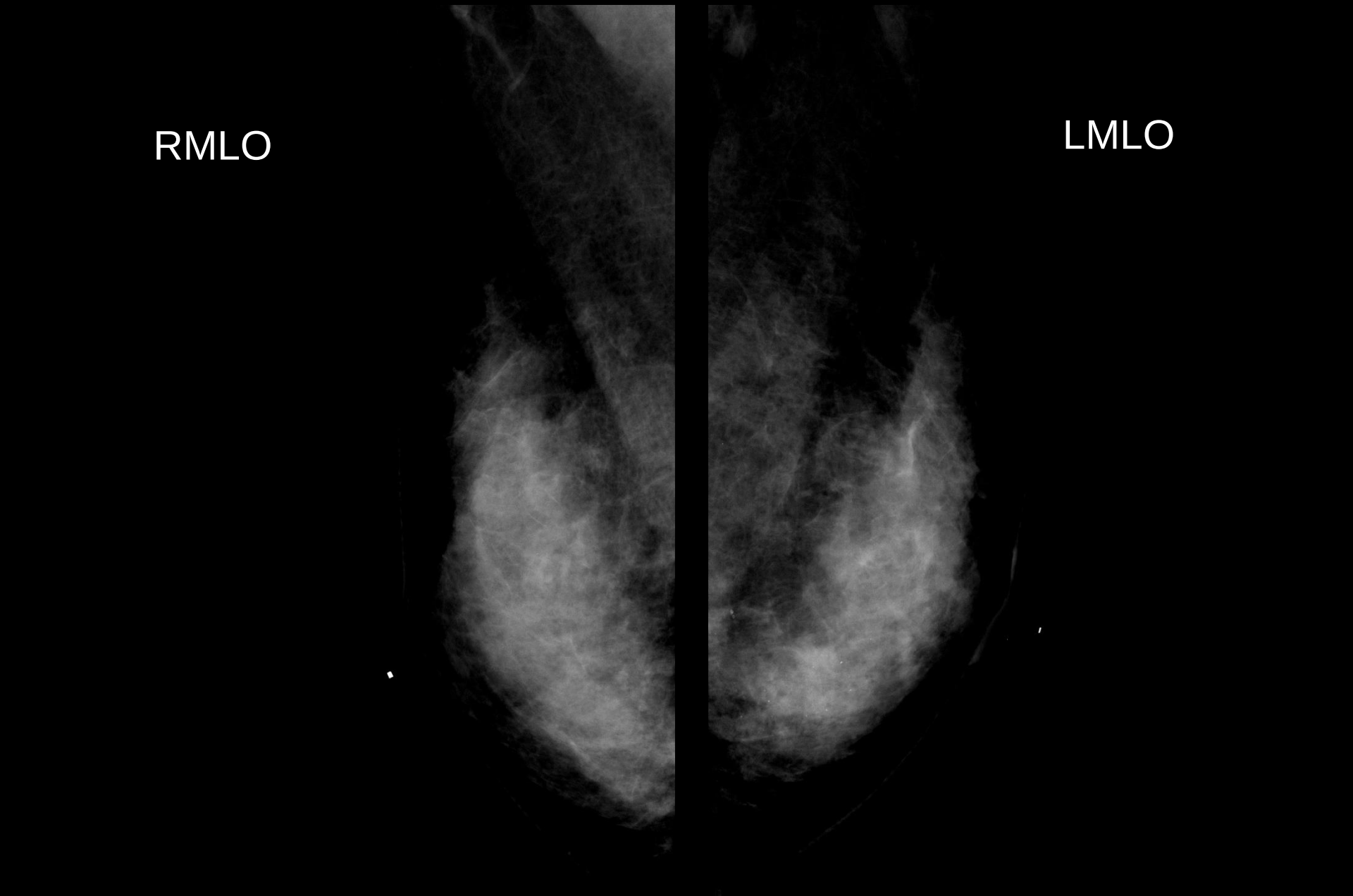
A47

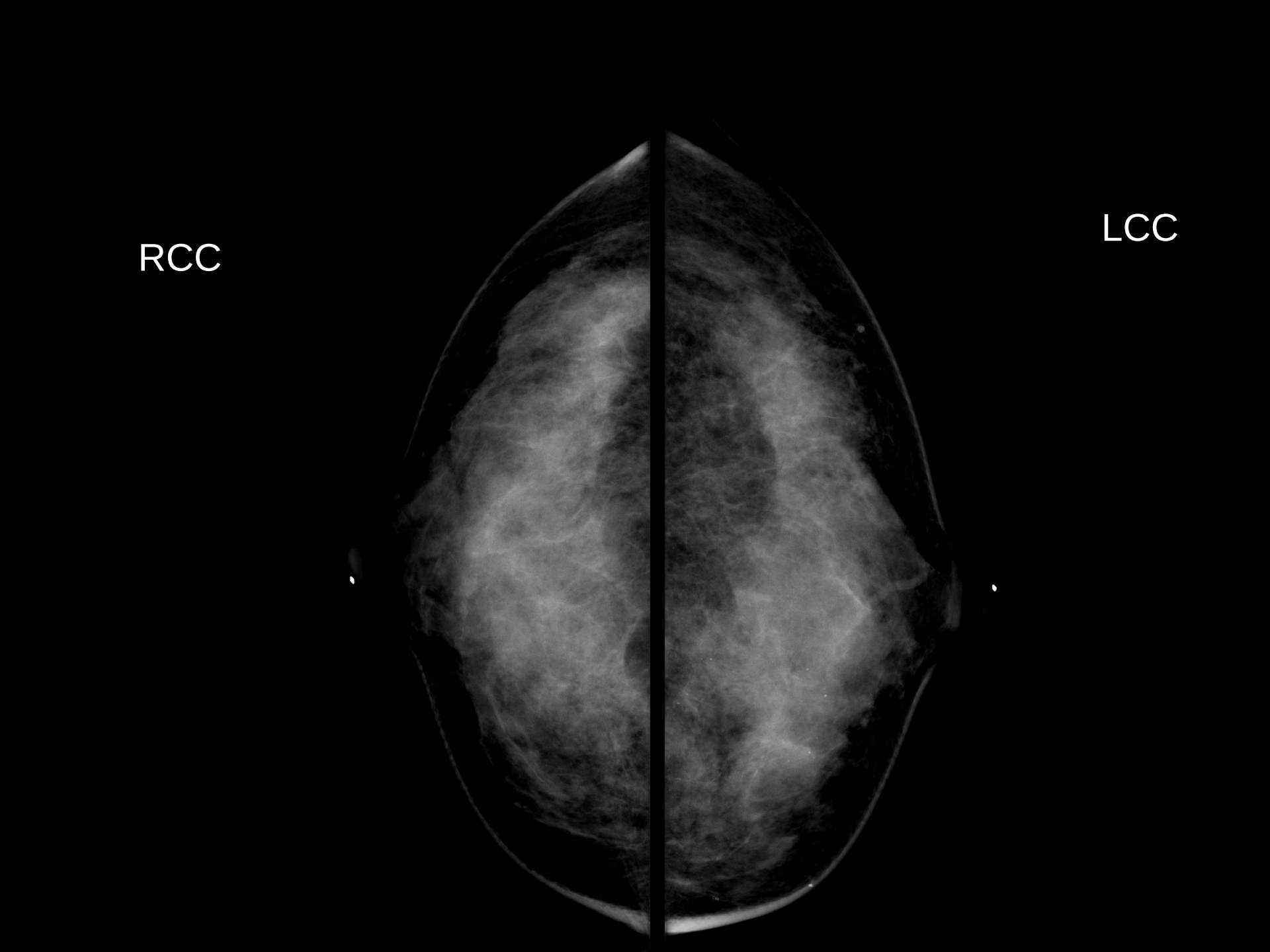
ANS： Right gynecomastia

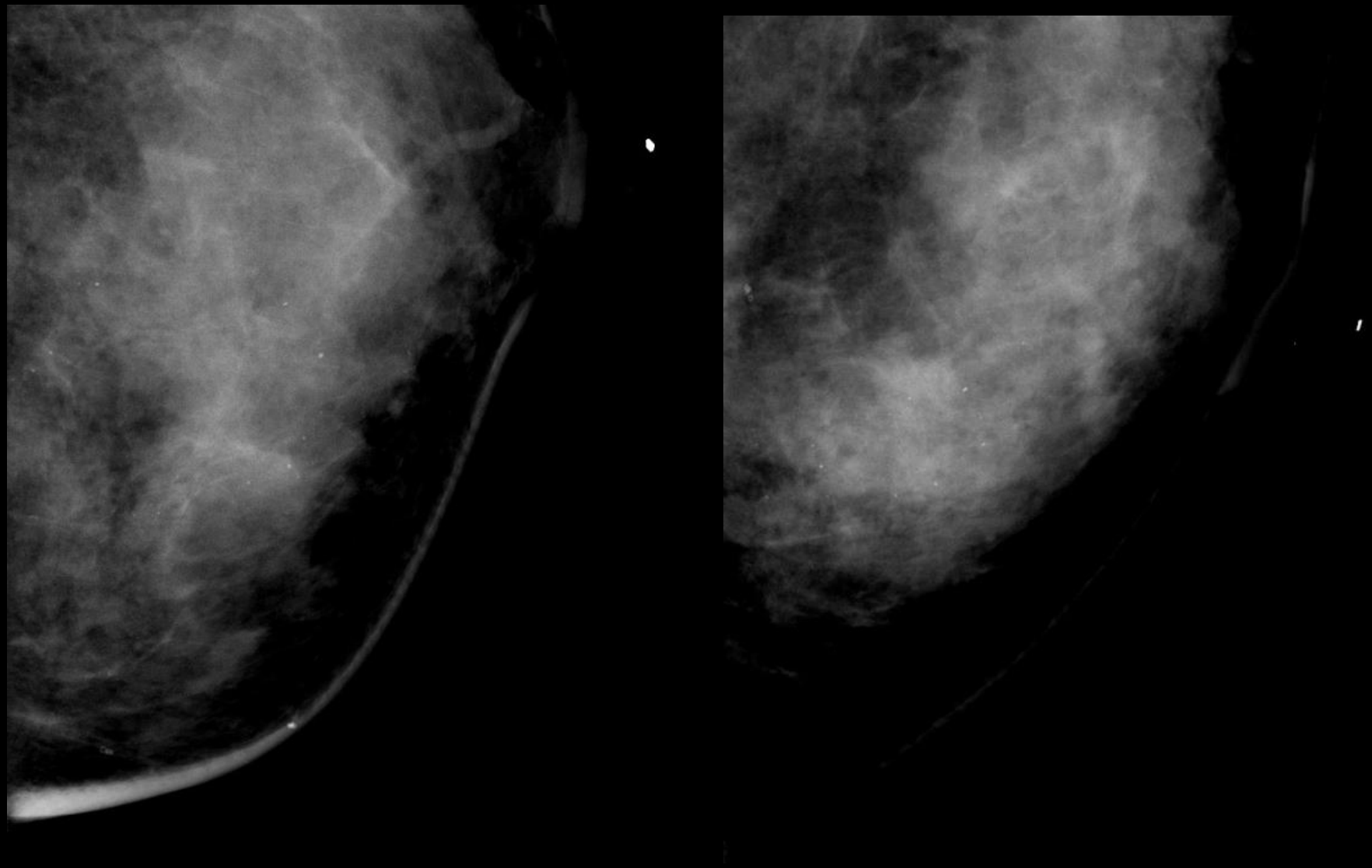
Q48

性別：Female　　年齡：39 y/o

主訴：Health examination




RCC
LCC



LLIQ magnification view

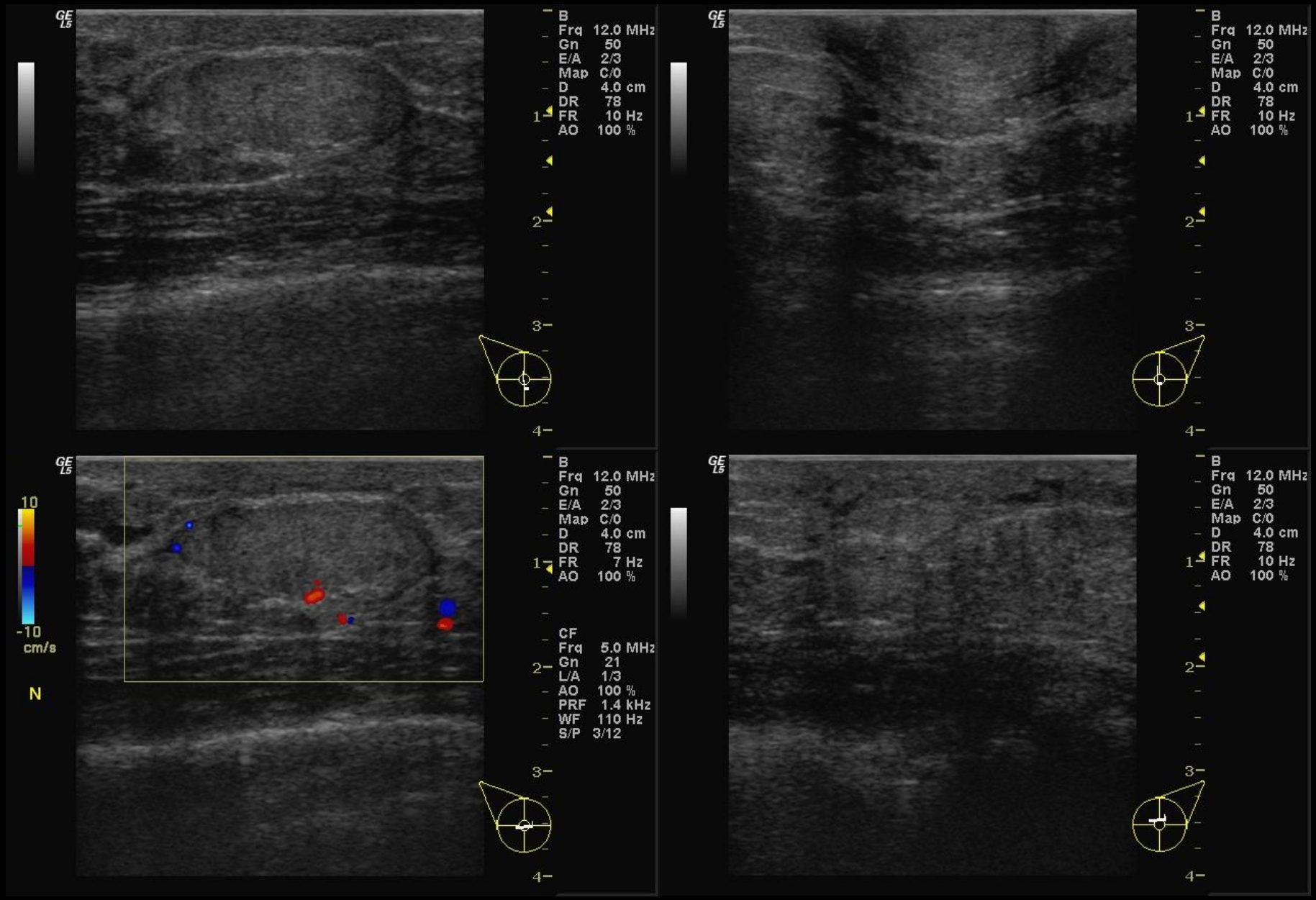
A48

ANS：Segmental-distributed amorphous microcalcification in lower inner quadrant of left breast with irregular obscure mass, BIRADS-IV or V,

Q49

性別：Female　　年齡：32 y/o

主訴：Heath examination. Breast-feeding(+).

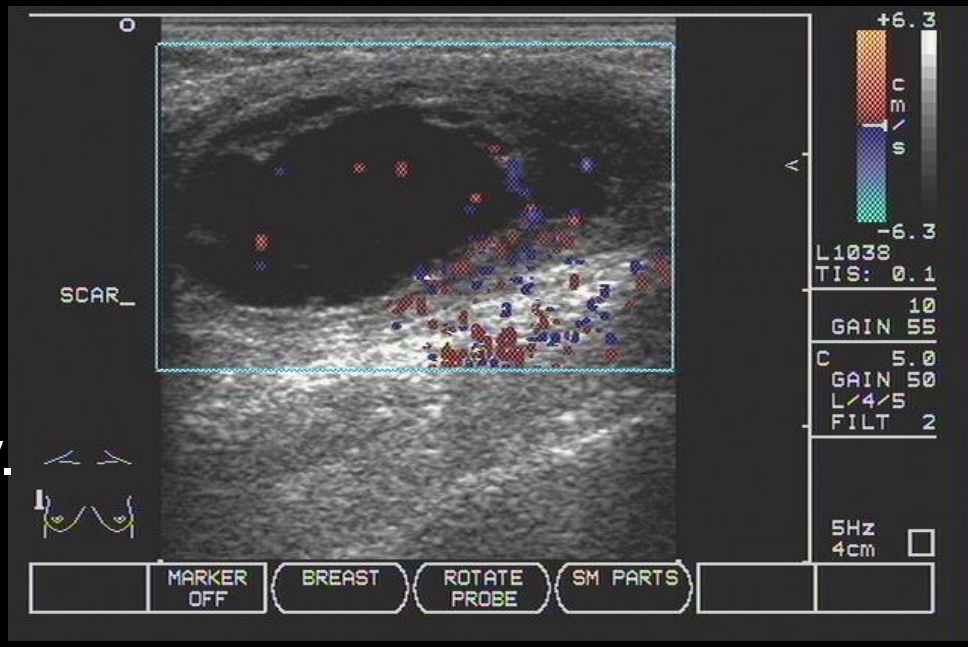


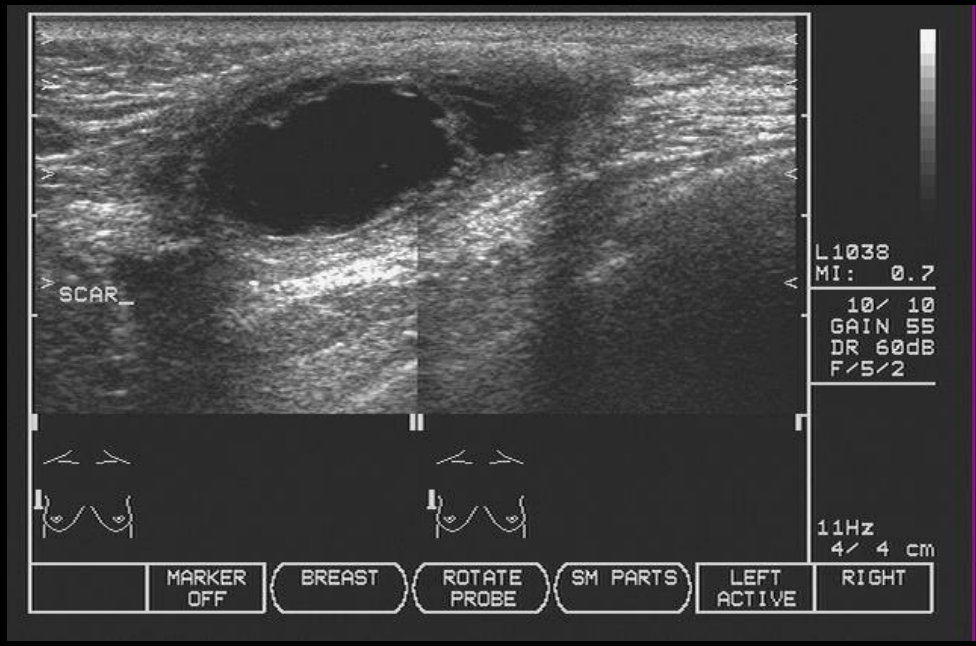
A49

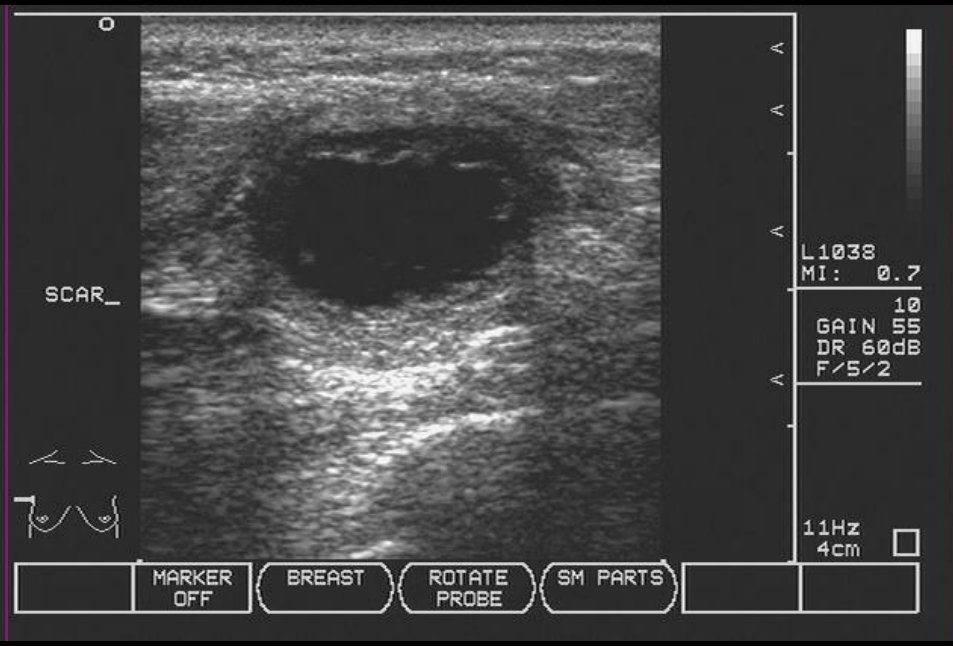
ANS：Galactocele

Q50

性別：Female
年齡：62 y/o
主訴：Right breast CA post modified radical mastectomy. Follow-up sonography.







A50

ANS： Seroma