Sex : Male
Age : 50 y/o
Admission Date : 91/01/11
Pathology number:Th0200374

- **Chief Complaint** :
  LLQ & left lower back pain for 3 months

Present illness

This patient suffered from left flank and LLQ intermittent dull pain since 3 months ago.Ðyspnea on exertion was also complained .He visited 郵政 hospital and renal sonography revealed left renal mass about 10 cm.So he was transferred to our hospital for further evaluation.

He is a victim of uremia diagnosis at 國泰 hospital at December 2000 and received regular hemodialysis 3 times per week at 郵政 hospital.

Past and personal history

- Systemic disease :ESRD with H/D in 郵政 hospital.
- Surgical history:AV shunt at 國泰 hospital
- Denied HTN , DM, Hyperlipidemia
- Denied food or drug Allergy.
- Denied smoking and drinking.

Family history

non-contributory

Physical Examination

- **Cons. : Clear**
- **Vital sign : TPR:36.8℃, 72, 18**
  BP:146/90mmHg
- **HEENT : conjunctiva - pale**
- **Chest : bilateral lower lung field rales**
- **Heart : RHB**
- **Abdomen : left palpable abdominal mass with tenderness**

Laboratory Data

- **CBC/DC :**

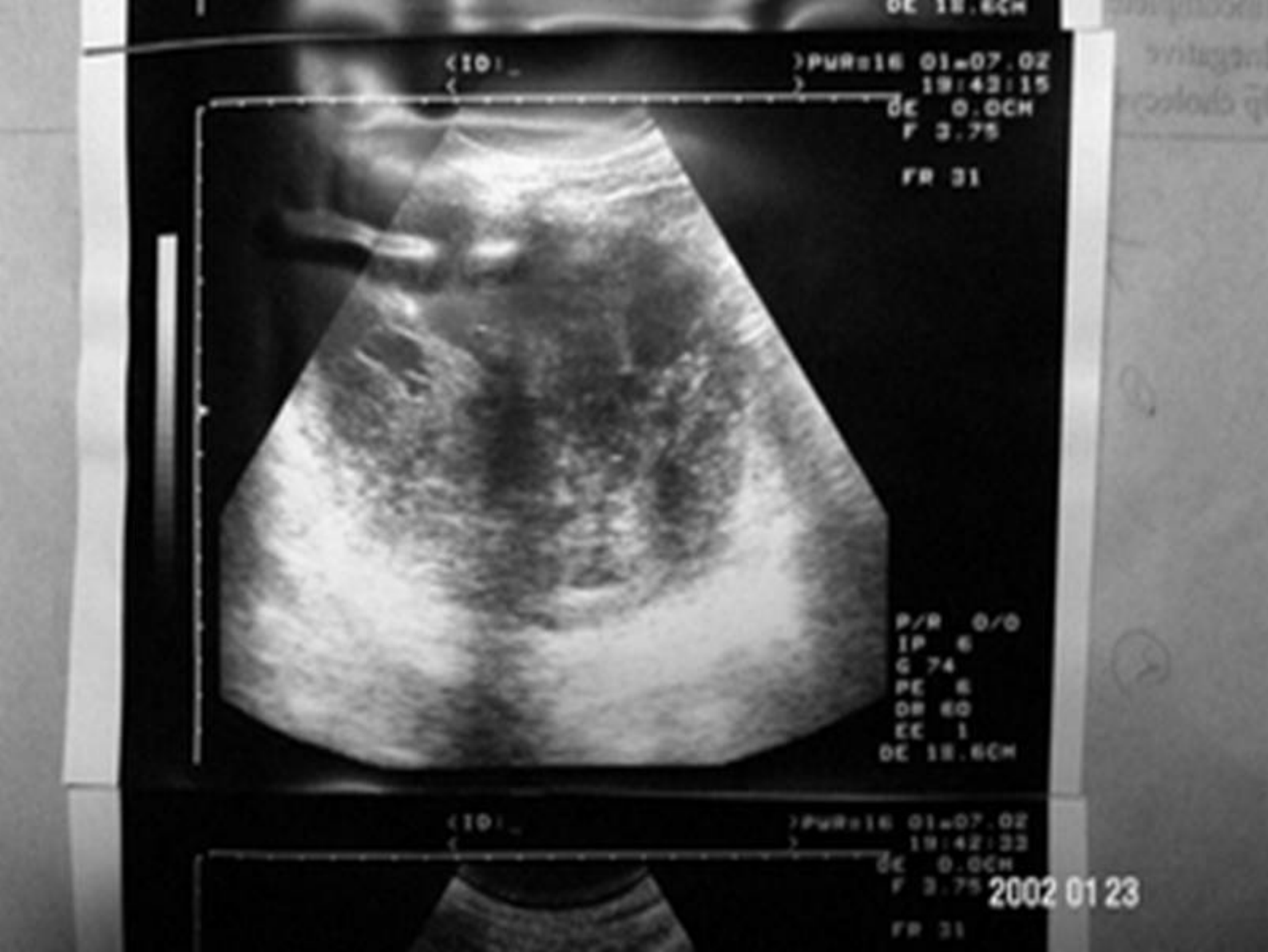
  1/11 : WBC-7010 RBC-2430000 HGB-7.6 HCT-21.3

  MCV-87.7 PLT-308000 NEUT-76

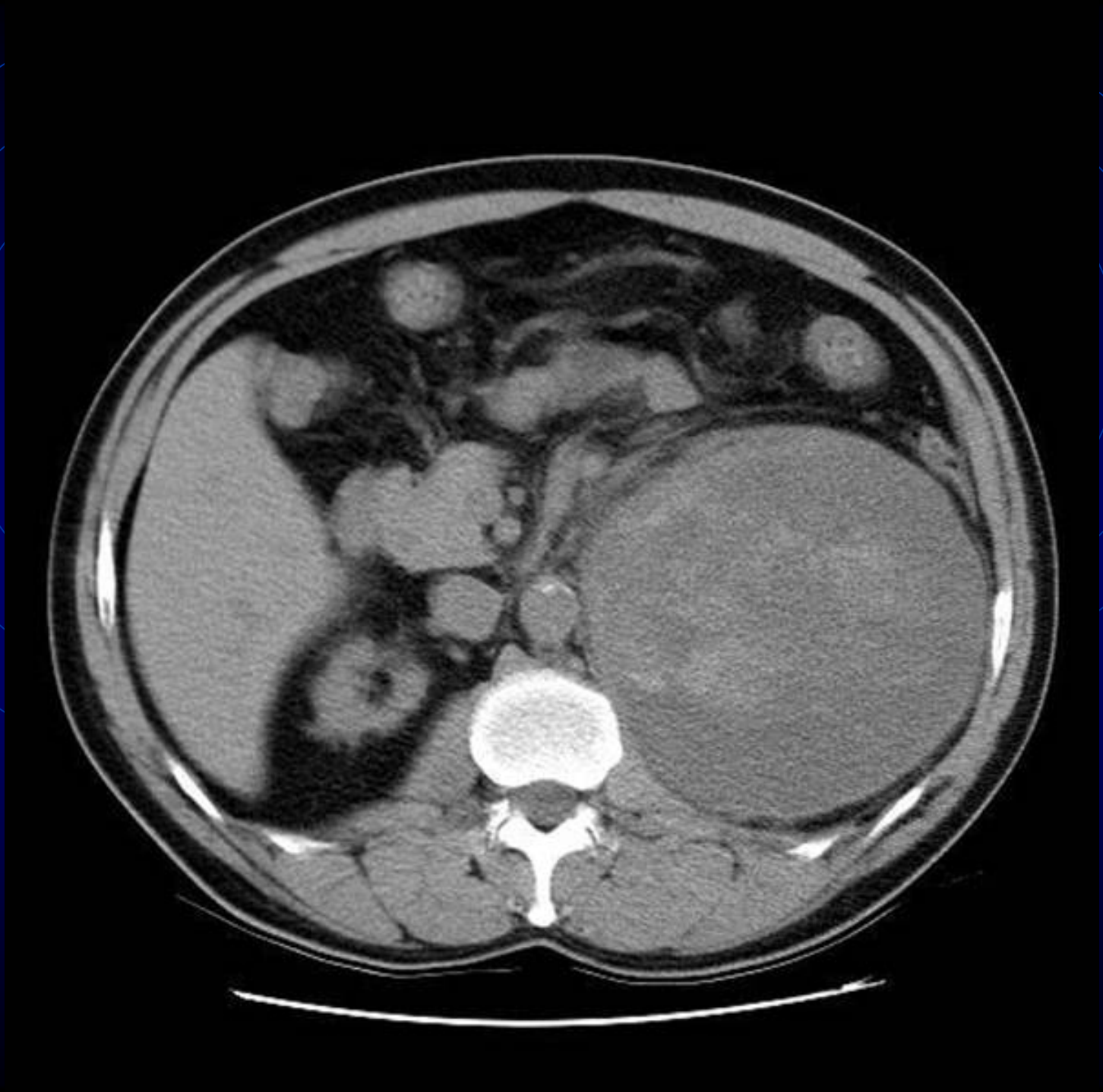
- **Biochemistry : GLU-92 BUN-105 CRE-12.2**

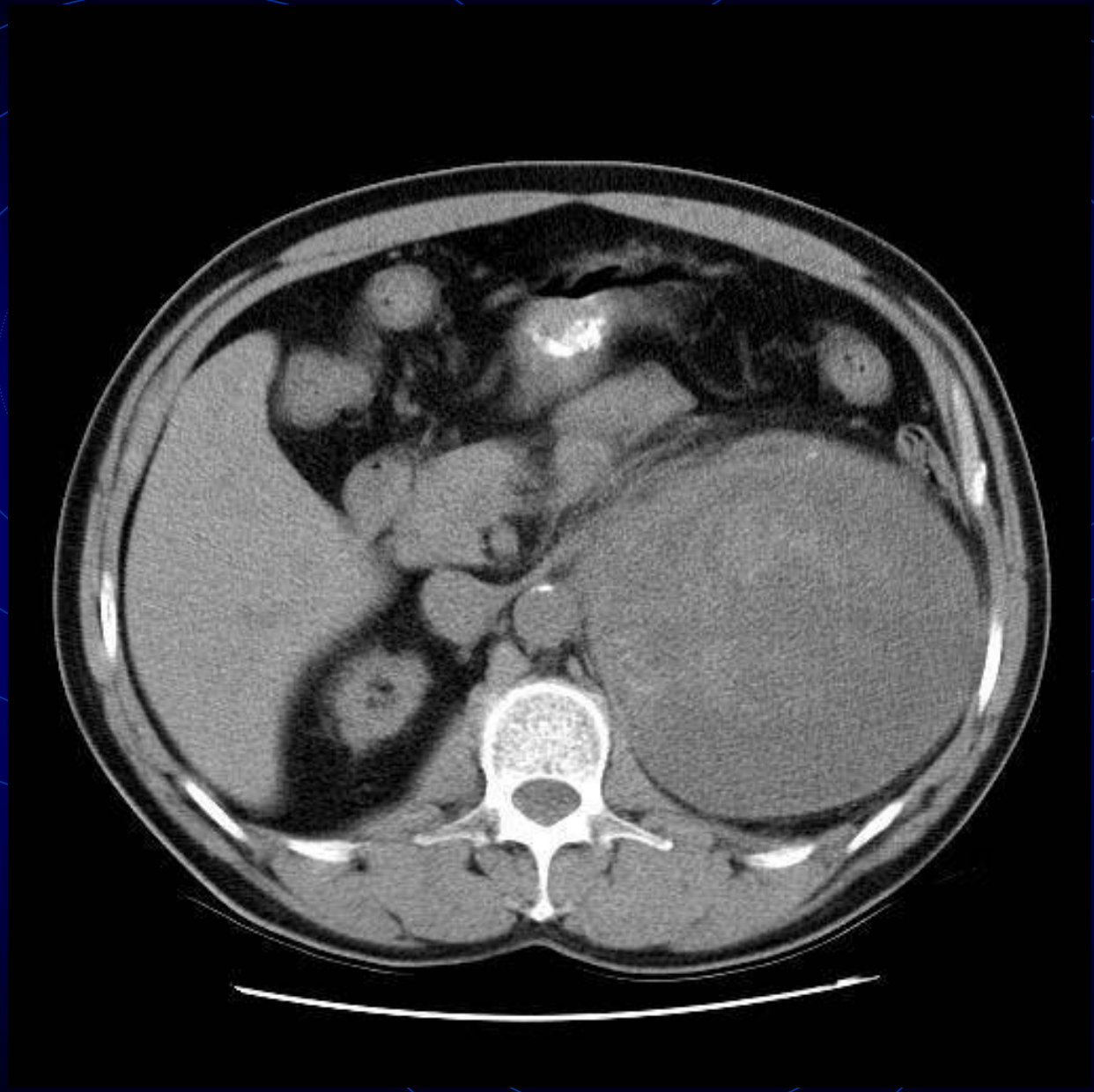
  GOT-12 GPT-11 Na-140 K-6.0

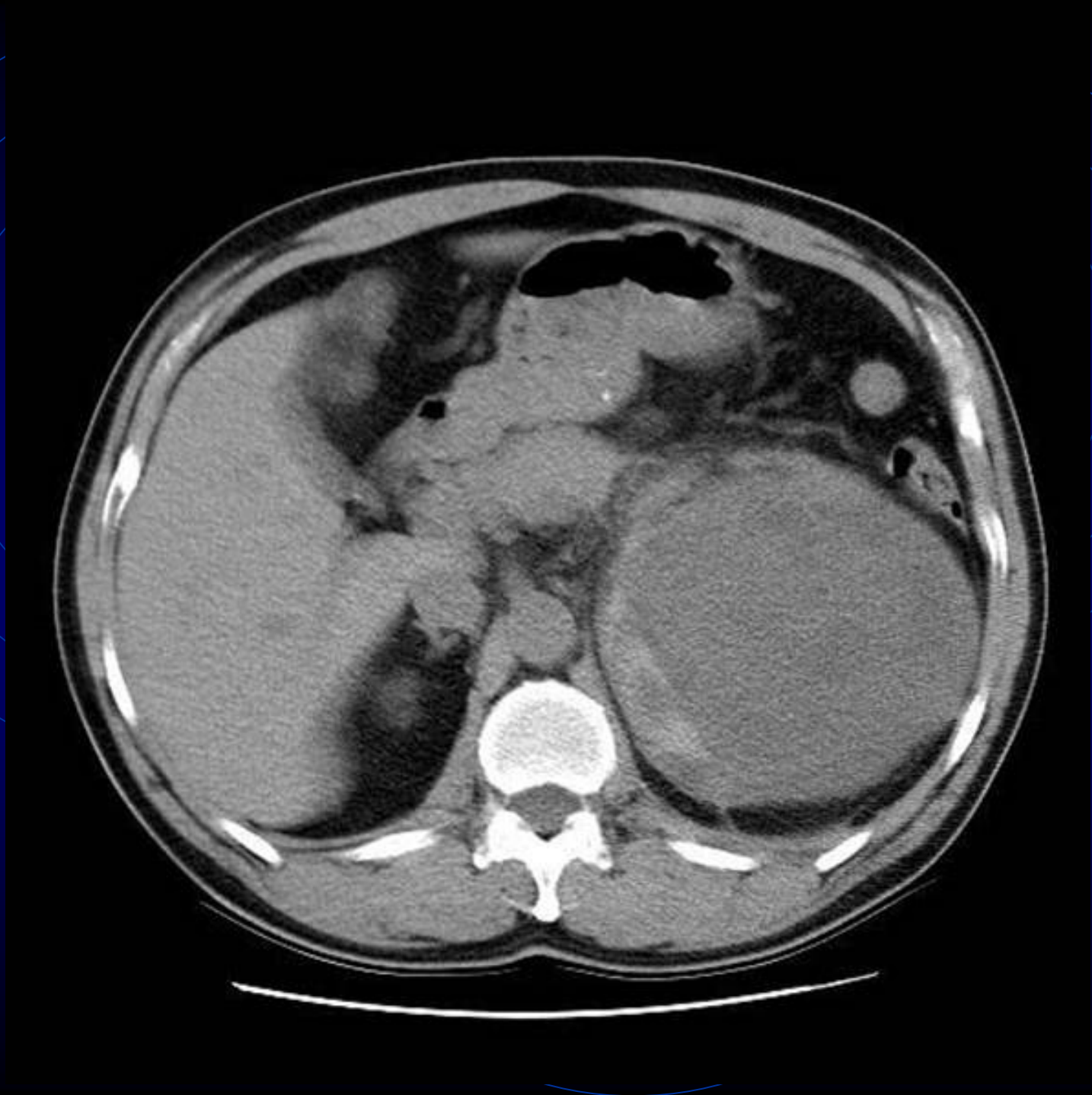
  PT-10.92sec APTT-28.65sec

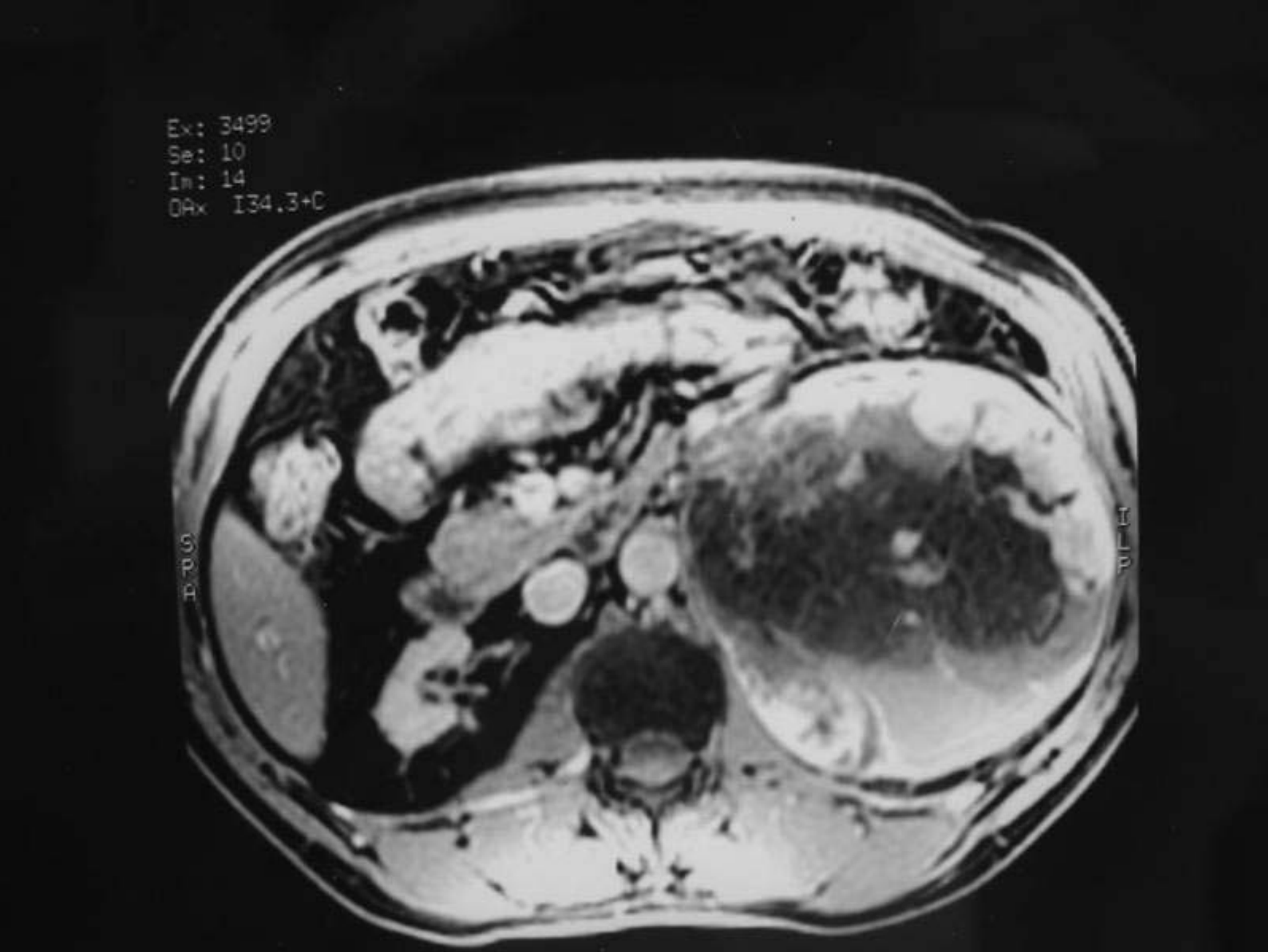

DE 18.6CM
PWR=16 01=07.02
19:42:15
DE 0.0CM
F 3.75
FR 31
P/R 0/0
IP 6
G 74
PE 6
DR 60
EE 1
DE 18.6CM
PWR=16 01=07.02
19:42:33
DE 0.0CM
F 3.75
FR 31
2002 01 23

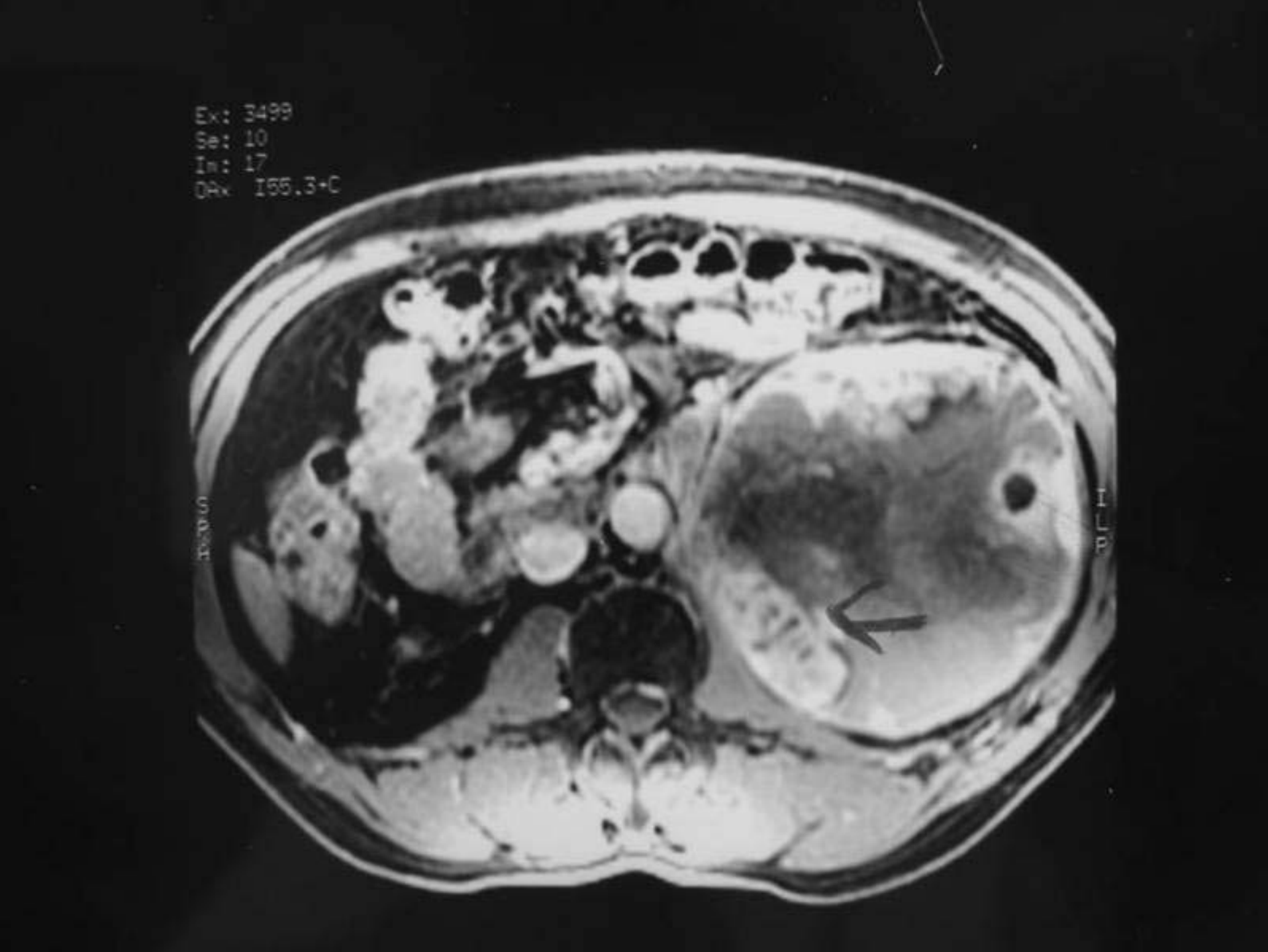
KUB:Soft tissue mass over left abdominal

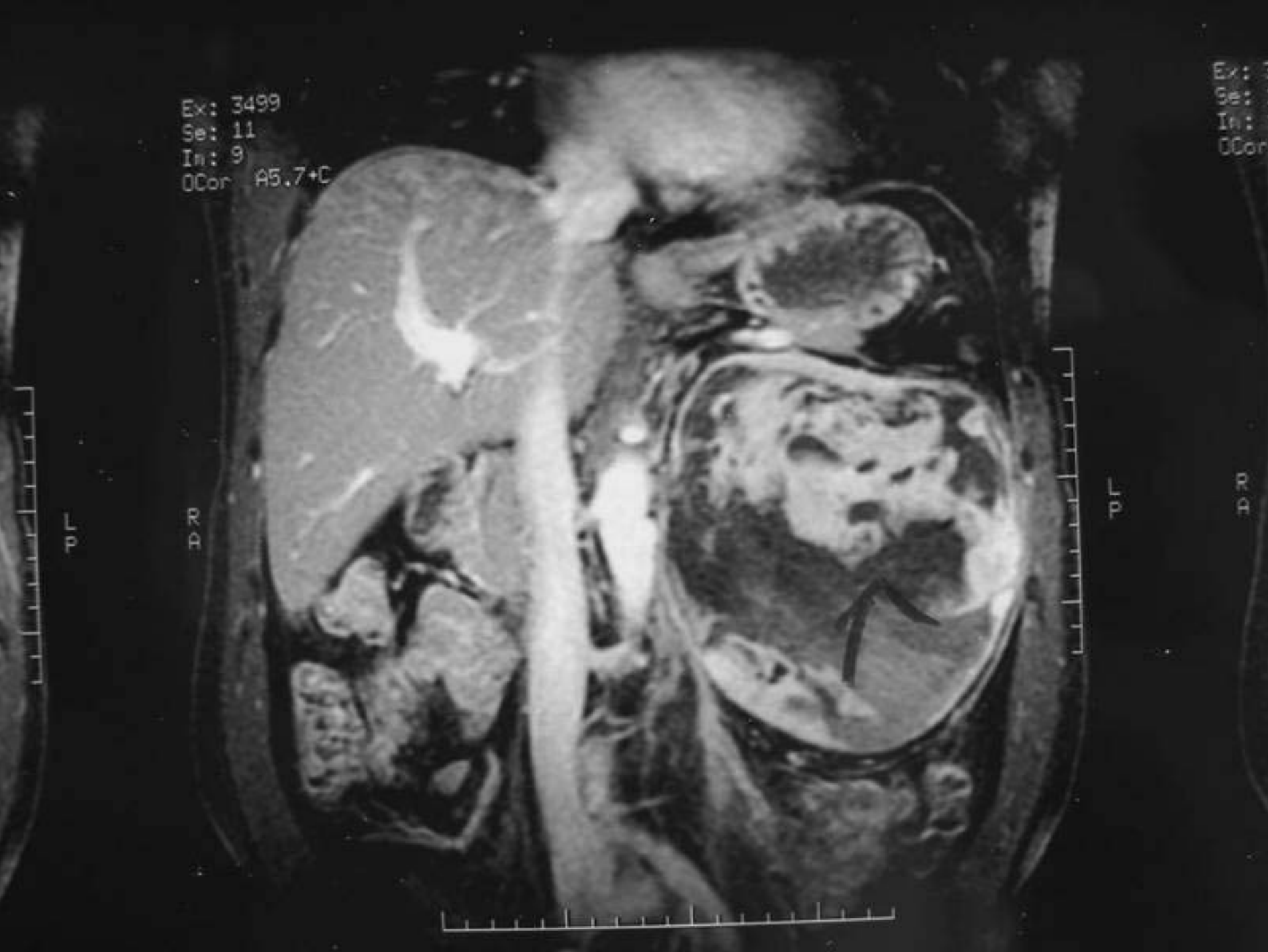


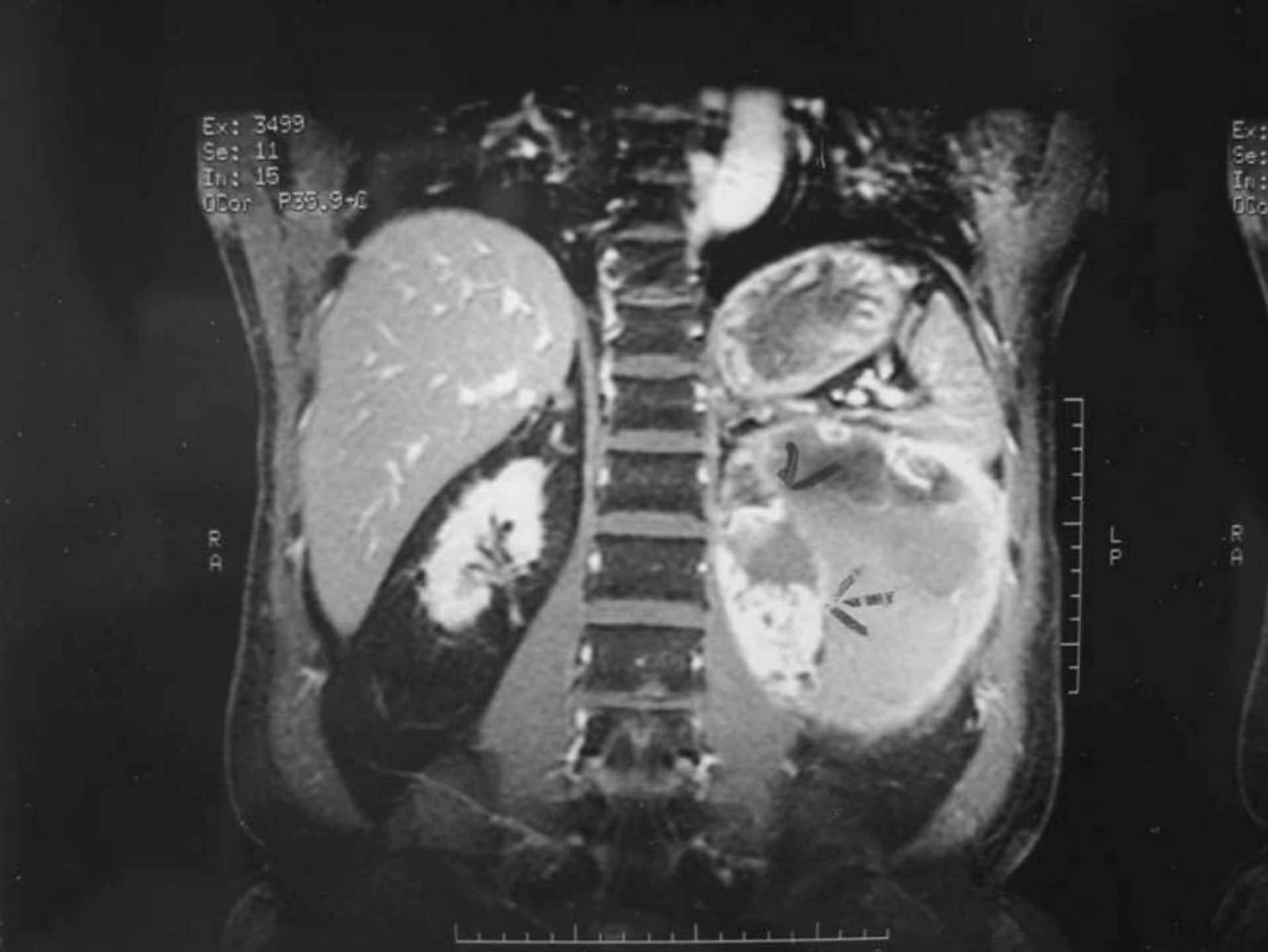


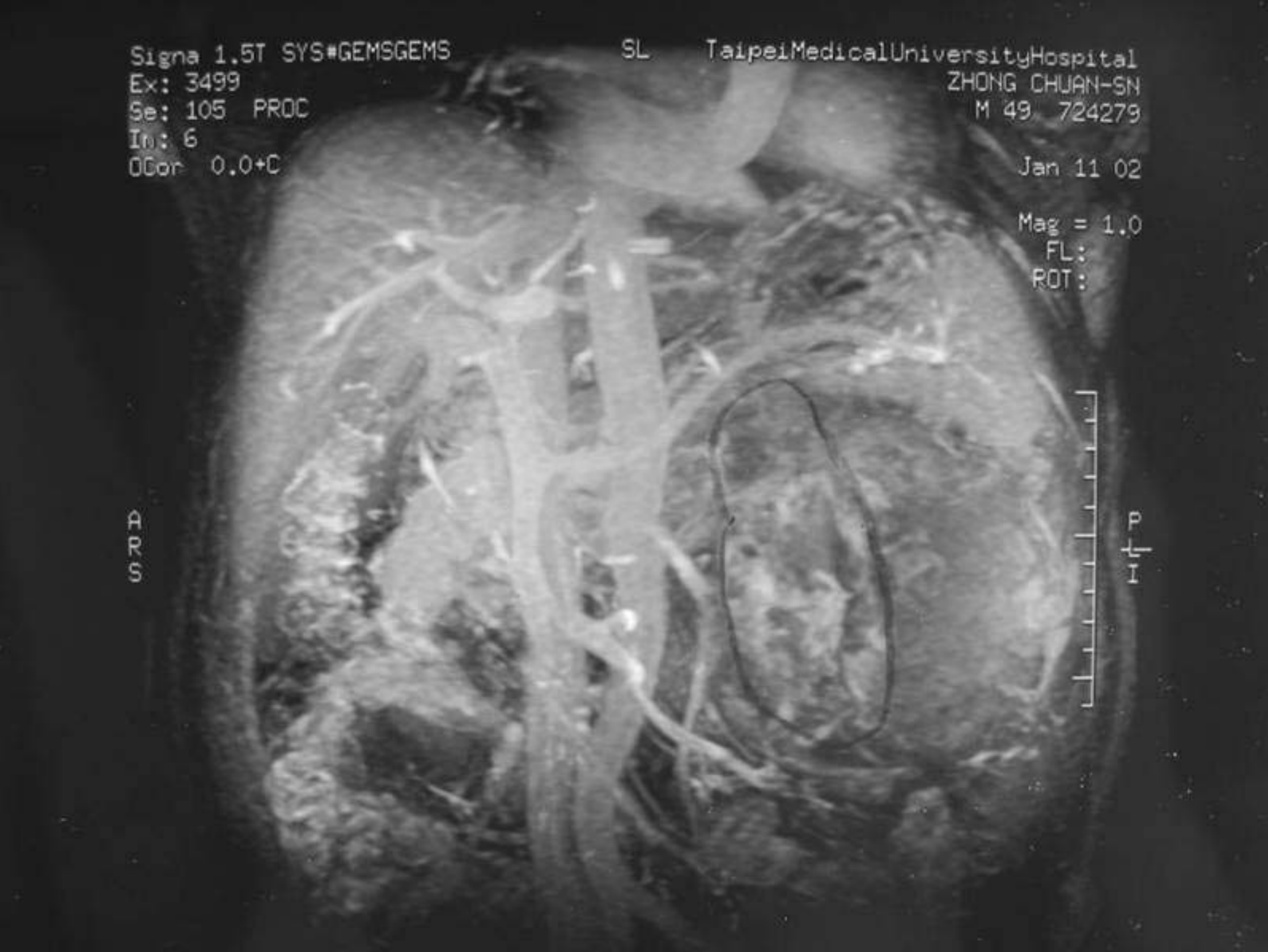


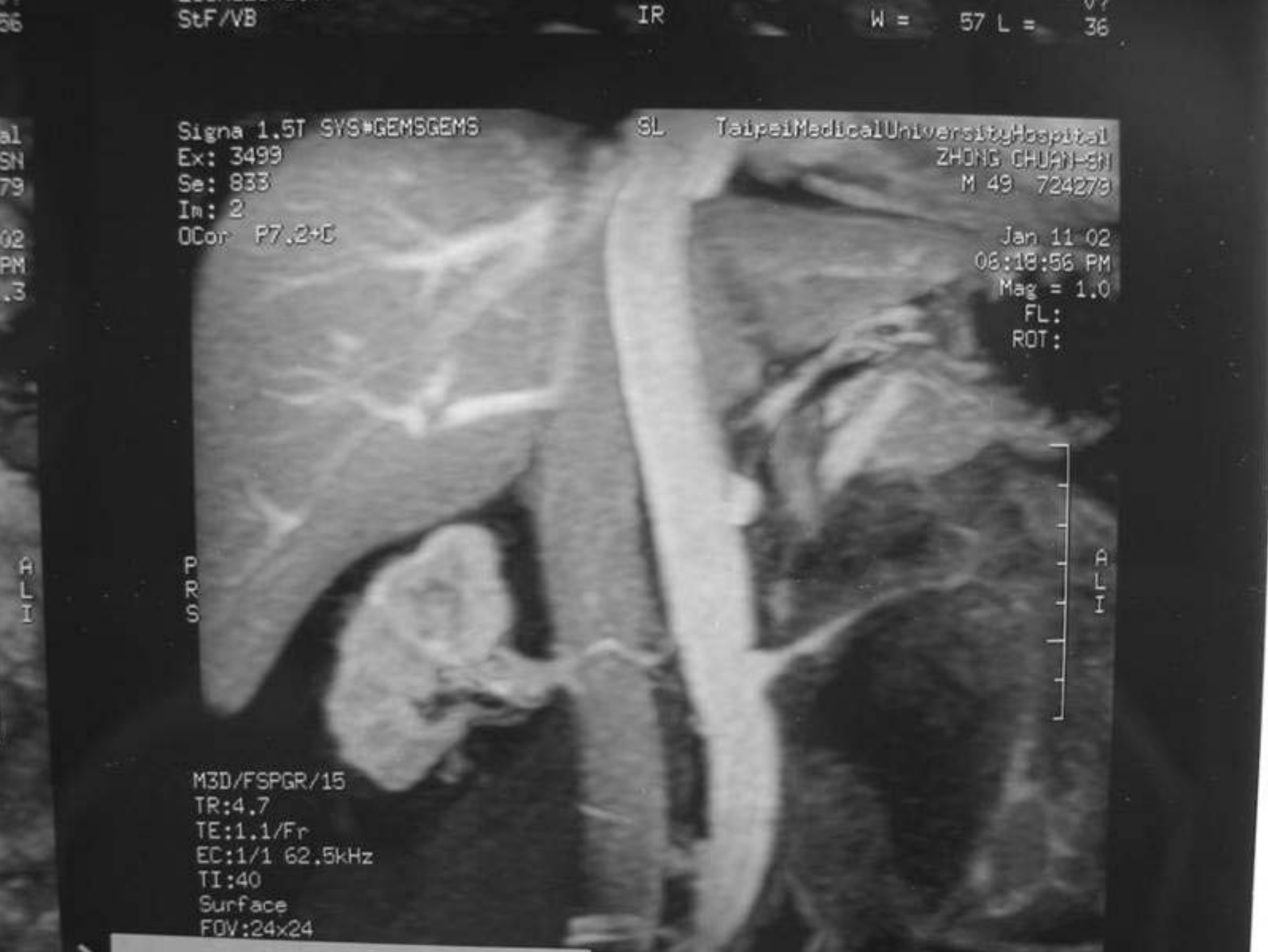

Ex: 3499
Se: 10
Im: 14
OAx I34.3+C
R L
S I

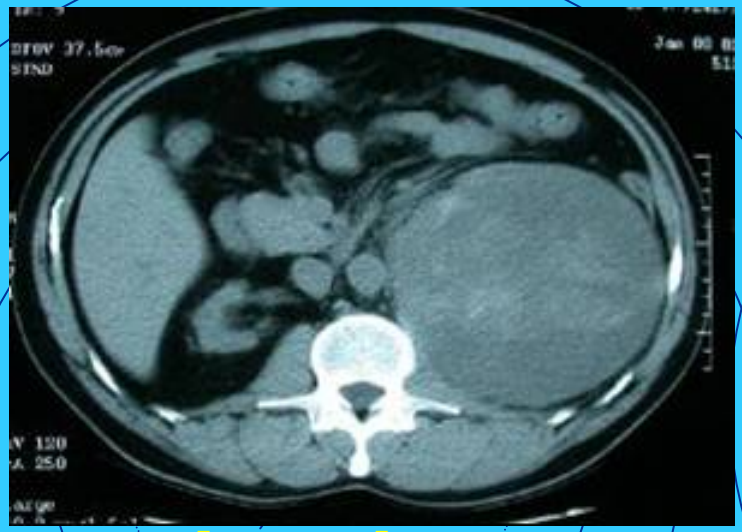

Ex: 3499
Se: 10
Im: 17
GRx I65.3-C


Ex: 3499
Se: 11
Im: 9
OCor A5.7+C
R
A
L
P

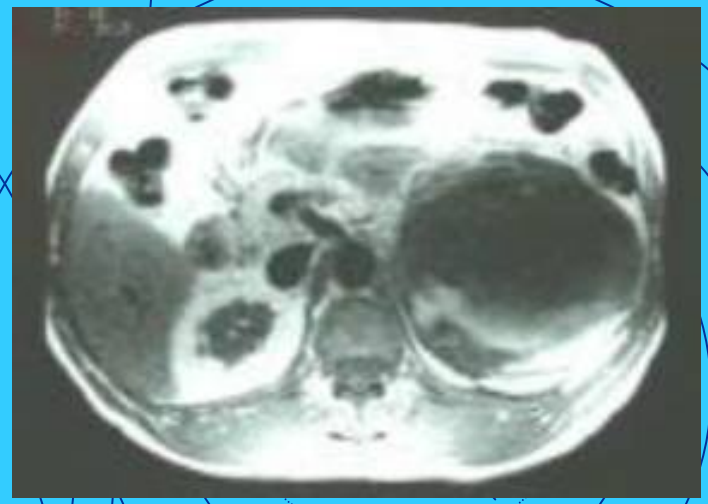

Ex: 3499
Se: 11
In: 15
0Cor P35.9+0
R
A
JP
R
A


Signa 1.5T SYS#GEMSGEMS
Ex: 3499
Se: 105 PROC
In: 6
0Cor 0.0+C
SL TaipeiMedicalUniversityHospital
ZHONG CHUAN-SN
M 49 724279
Jan 11 02
Mag = 1.0
FL:
ROT:
A
R
S
P
I

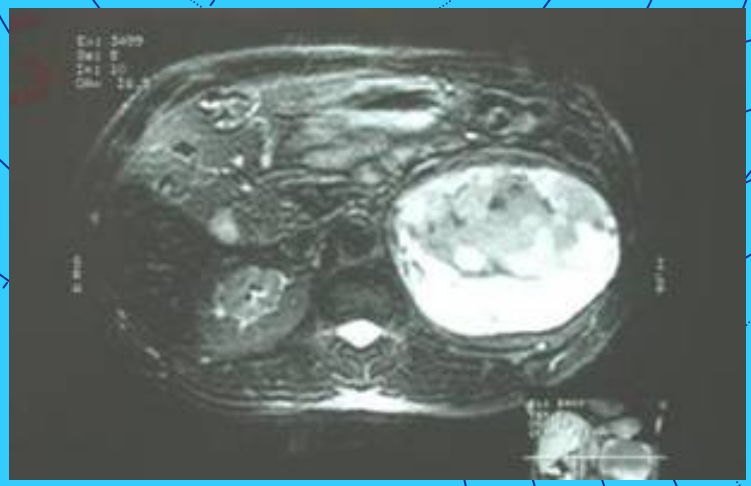

StF/VB
IR
W = 57 L = 36
Signa 1.5T SYS*GEMSGEMS
Ex: 3499
Se: 833
Im: 2
OCor P7.2+C
SL TaipeiMedicalUniversityHospital
ZHONG CHUAN-SN
M 49 724279
Jan 11 02
06:18:56 PM
Mag = 1.0
FL:
ROT:
P
R
S
A
L
I
M3D/FSPGR/15
TR:4.7
TE:1.1/Fr
EC:1/1 62.5kHz
TI:40
Surface
FOV:24x24



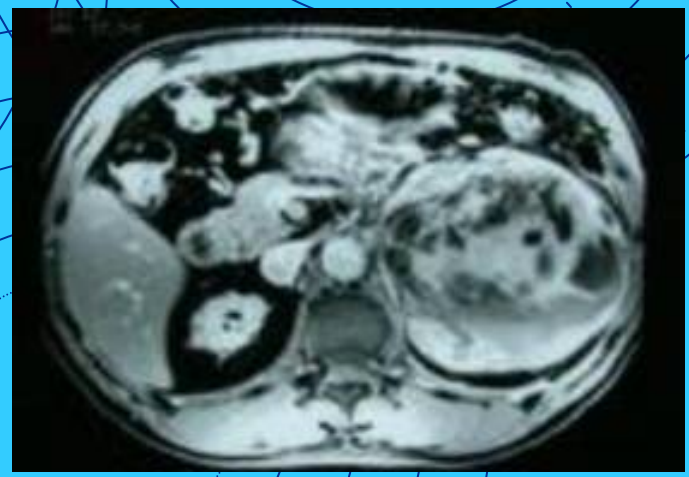
Non-enhanced CT scan



T1WI (no contrast)



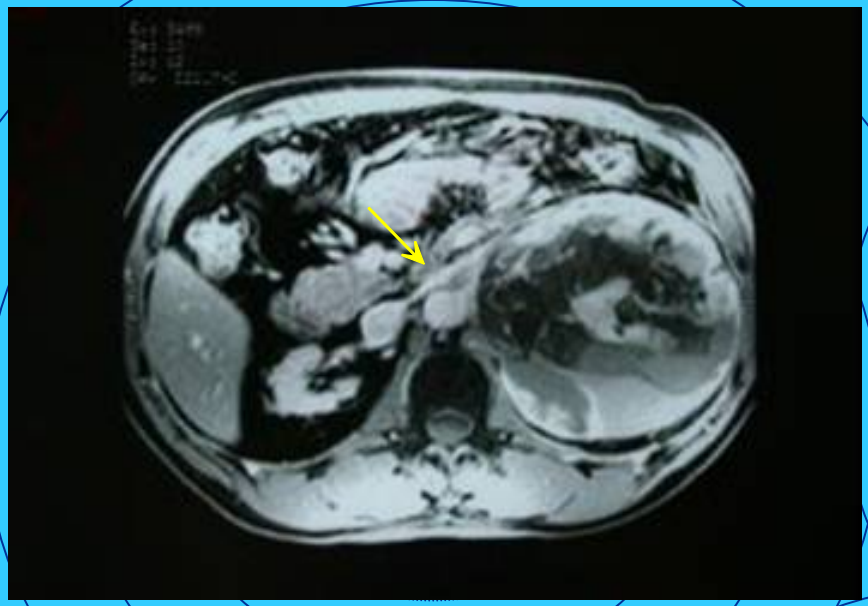
T2WI

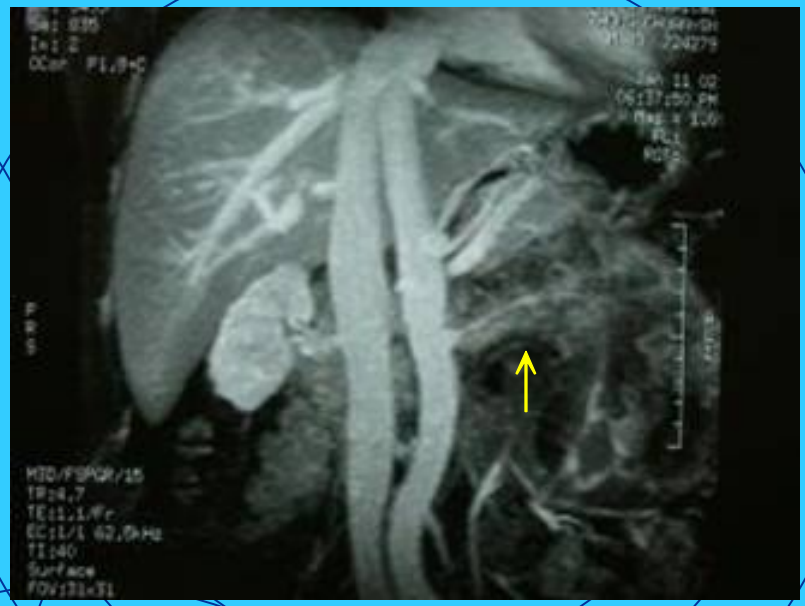


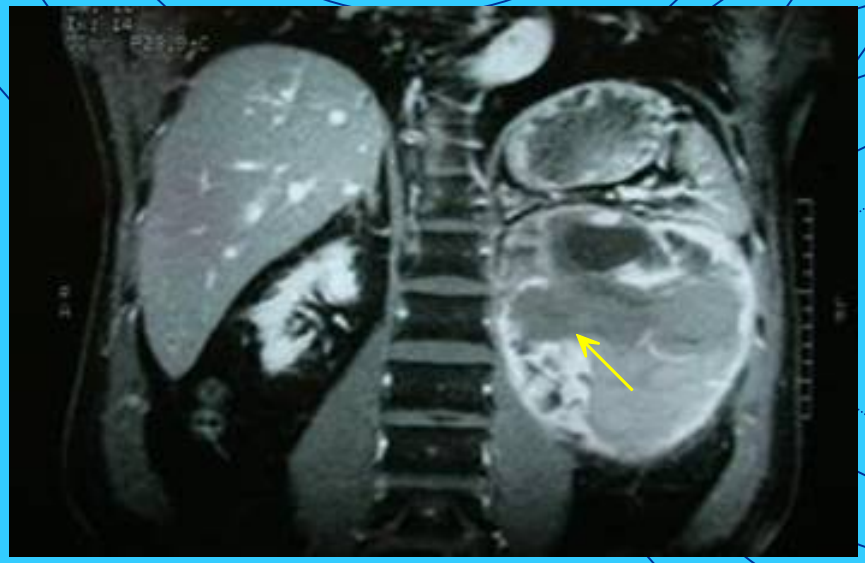
T1WI (with contrast)

Non-enhanced renal CT performed on 91-01-08

MRI performed on 91-01-11







- **Left renal mass confined within Gerota's fascia.**
- **Anterior displacement of left renal vein.**
- **Renal artery is intact.**

Differential diagnosis

- Renal cell carcinoma
- Angiomyolipoma
- Lymphoma
- Metastasis
- Transitional cell carcinoma
- Renal sarcoma
- Wilms’ tumor

Angiomyolipoma

- Angiomyolipoma are seen on CT as well-circumscribed renal mass.
- The presence of intratumoral fat is almost diagnostic of angiomyolipoma.
- Highly echogenic lesion.
- High-signal intensity at T1-weighted image identified a fat-containing mass.

Metastasis

- It is uncommon for for a metastasis to present as a solitary renal mass in a patient with no history of malignancy.
- Most metastasis are small(<3cm),multiple (>50%),bilateral,and noncontour deforming.

Lymphoma

- Bilateral renal involvement occurs three times more frequency than dose unilateral disease.
- Multiple renal nodules are the most common CT manifestation of renal lymphoma,occurring in about 59% of cases.
- The nodules typically show homogeneous appearance.
- Renal involvement from retroperitoneal lymphoma commonly occurs either by invasion through the renal capsule or extension through the renal sinus.

Renal sarcoma

- Account for fewer than 2 % of malignancy renal parenchymal neoplasms.
- On CT and MRI,its appearance is similar to that of RCC.
- Typically,renal sarcomas are very large , poorly margination,irregularly-shaped,local mass that are heterogeneous with low-attenuation areas (central necrosis) precontrast,and show heterogeneous enhancement after contrast ,are typical.

Renal Sarcoma

- On MRI,renal sarcoma appear similar to large RCC,with heterogeneous low signal on T1-weighted images,heterogeneous high signal on T2-weighted images.
- Capsular localization is a feature of more than 50% of these tumors.

Wilms’ tumor

- Wilms’ tumor accounts for 87% of pediatric renal neoplasms.Occurs most often during the first 7 years of life ,with a peak incident at 3.5 years.
- CT presents as a large ,spherical ,intrarenal mass with a well-defined rim of compressed renal parenchyma.
- On MRI,it has a low signal intensity on T1-weighted images and a high signal intensity on T2-weighted images.

Transitional cell carcinoma

- Most often,there is a intraluminal soft tissue mass in the pelvis ,calyces,or ureter.
- Usually isodense with parenchyma precontrast ,and enhance less than renal parenchyma.
- The soft tissue mass is often ill-defined and expanding the kidney without deforming the surface.

Renal cell carcinoma

- A mass often bulges the renal contour.
- RCC arises from the cortex,it is usually peripheral,94%~96% are exophytic.
- Most RCC are nearly isodense with renal parenchyma and somewhat heterogeneous.
- Hemorrhage tumors are hyperdense.
- RCC show some enhancement,but less than that of renal parenchyma,onCT or MRI.

Renal cell carcinoma

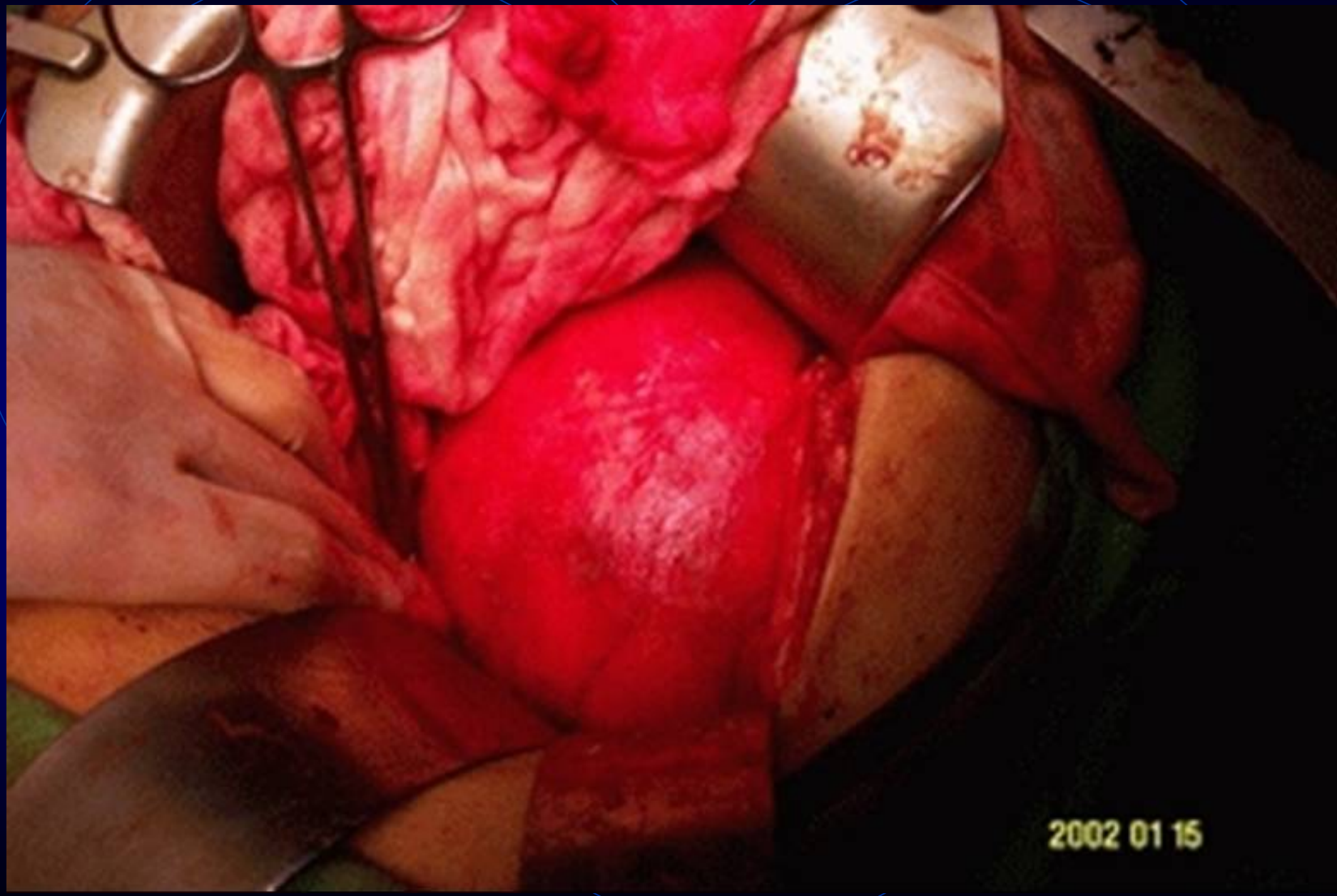
- An unsharp margin between the mass and renal parenchyma is very suggestive of malignancy.
- With over 80% of small RCC being well marginated.
- When present,the wall of a predominantly cystic RCC is perceptibly thick and usually irregular.

Conclusion

- Renal cell carcinoma
- Angiomyolipoma
- Renal sarcoma

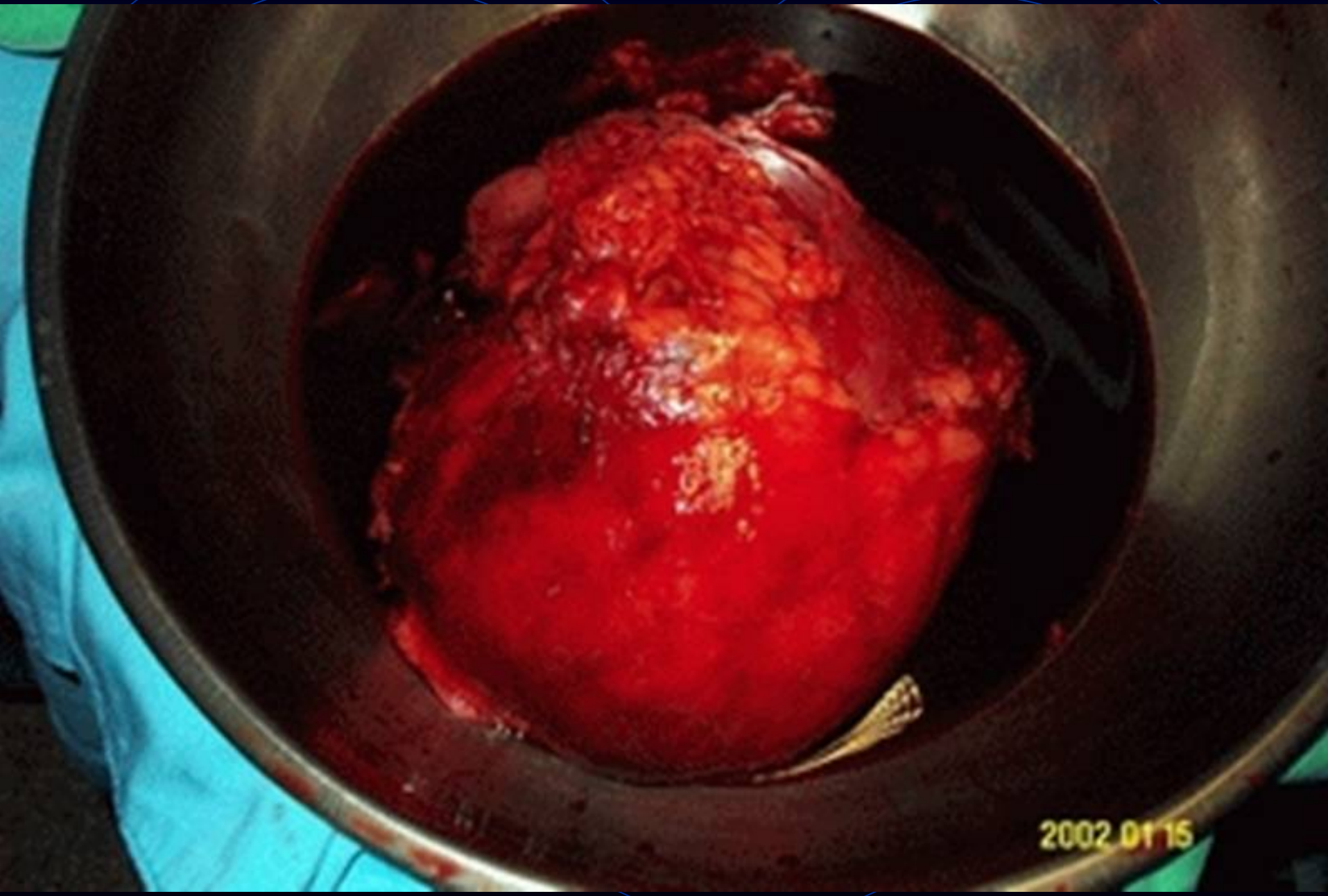
Treatment

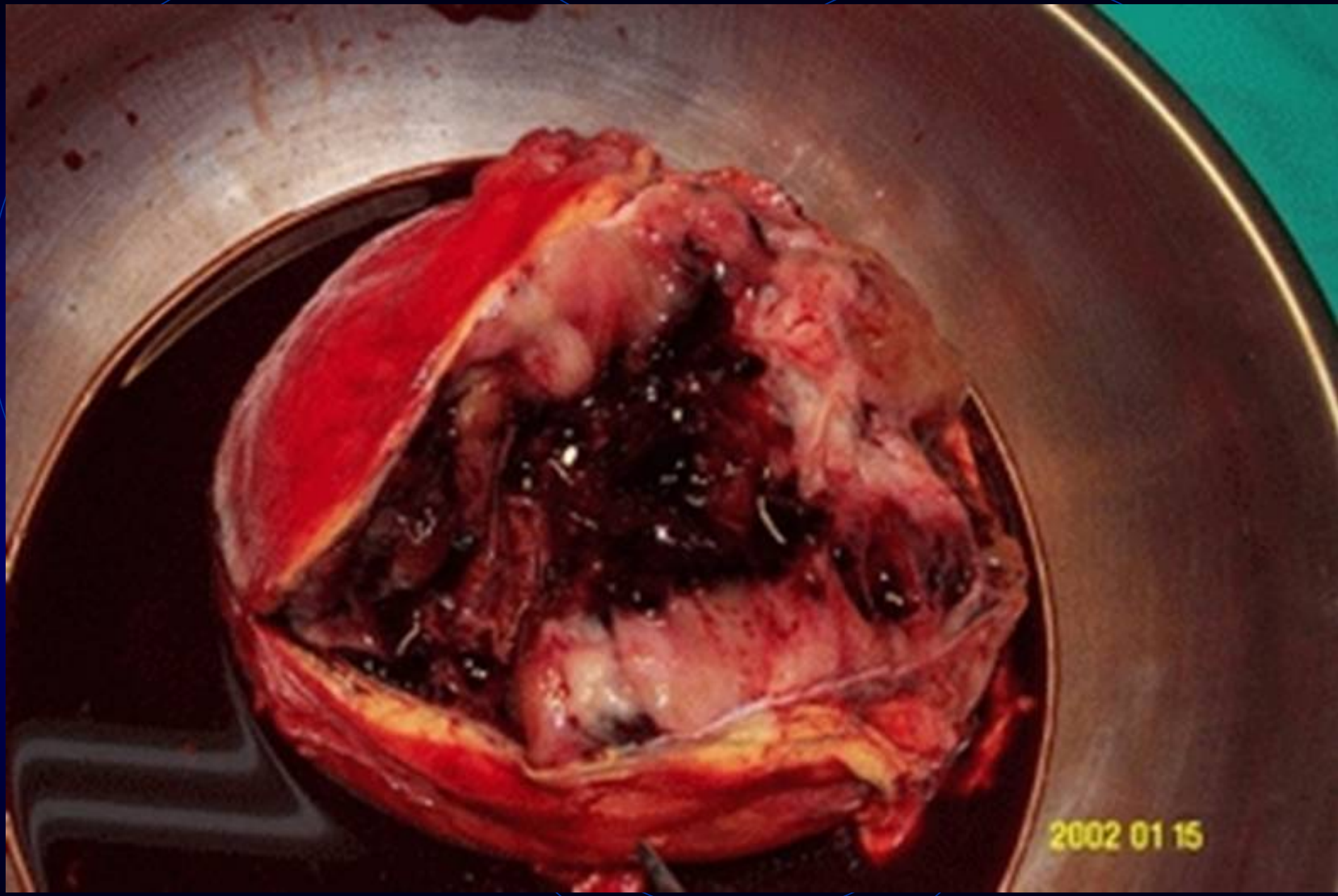
- **91/1/15 left radical nephrectomy**
- **R/T since 91/2/18**


2002 01 15

Gross finding

- 19x15x14 cm in size and 1250 gm in weight.
- The tumor is marked cystic and hemorrhage change with necrosis,myxoid.It is almost completely encapsulated by fibrous capsule.
- Fosi of extracapsular invasion are seen.
- Kidney size:5x4x3.2 cm.Atrophy and compressed by tumor.Renal pelvis is not invaded.No adrenal gland is seen.


2002 01 15


2002 01 15

Pathology report

- Perirenal soft tissue :
  undifferentiated sarcoma
- Kidney:1 undifferentiated sarcoma,invasion
  2 chronic pyelonephritis
- Ureter:minimal histological change
- Renal hilum:minimal histological change
- Lymph node ,hilum: no tumor involvement

Final diagnosis

- Undifferentiated Sarcoma