General History

- 50 y/o female
- felt headache, bone soreness and poor appetite for 3 months.
- Body weight decrease from 70 to 59 Kg.
- Urinary frequency and nocturia.

General History

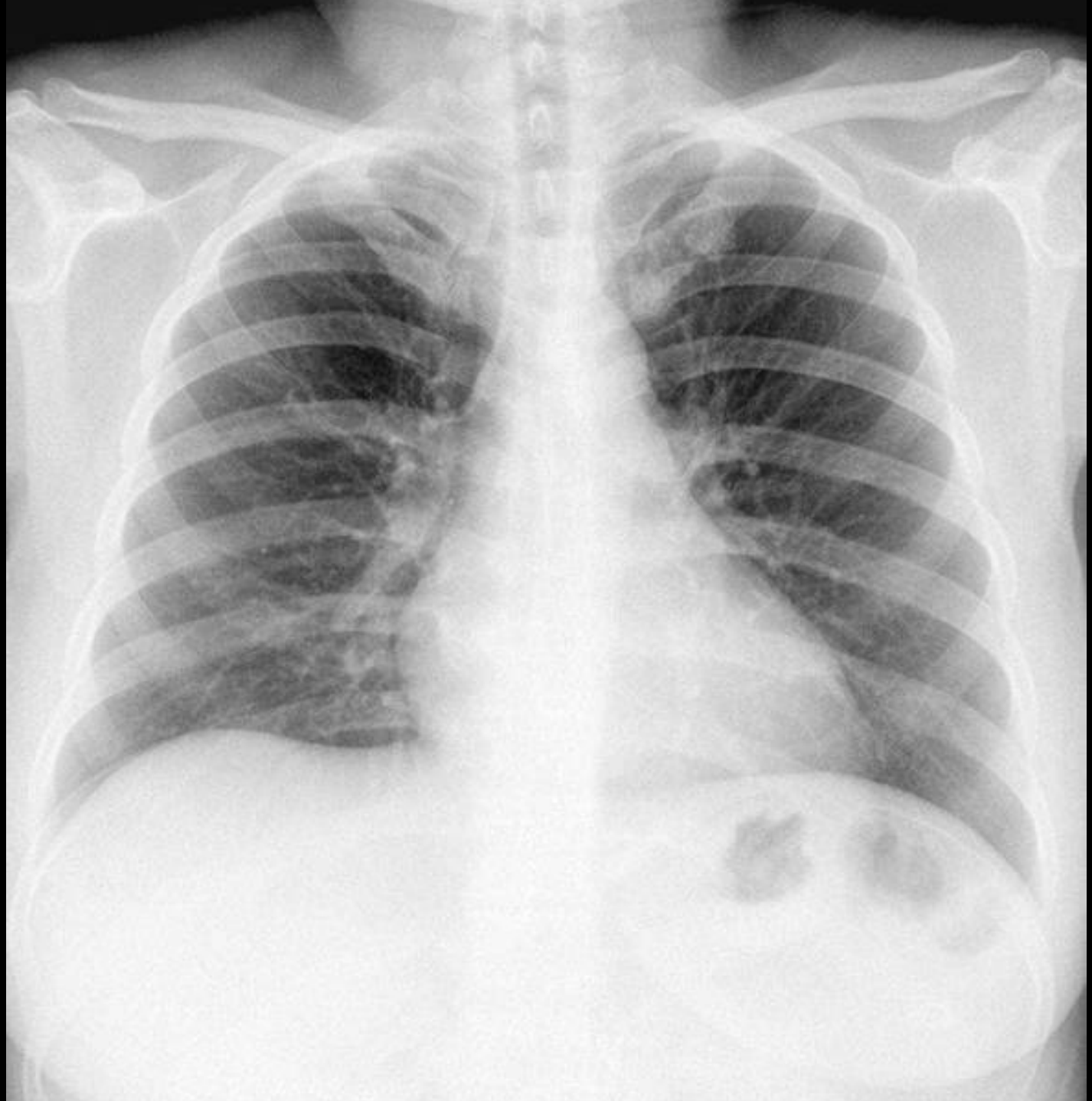
- Past surgical history:
  - s/p hemorrodectomy 3 years ago
  - s/p adrenalectomy 8 years ago
  - s/p appendectomy 20 years ago

General History

- Vital sign: T/P/R: 36.8/70/24
- BP: 120/80 mmHg
- PE: abdominal distension, soft, no tender

Lab Data

- CEA: 0.1 ng/ml
- CA 125: 6.6 U/ml
- AFP: 2.88 ng/ml
- B-HCG: 0.1 mIU/ml
- LDH: 95 IU/L



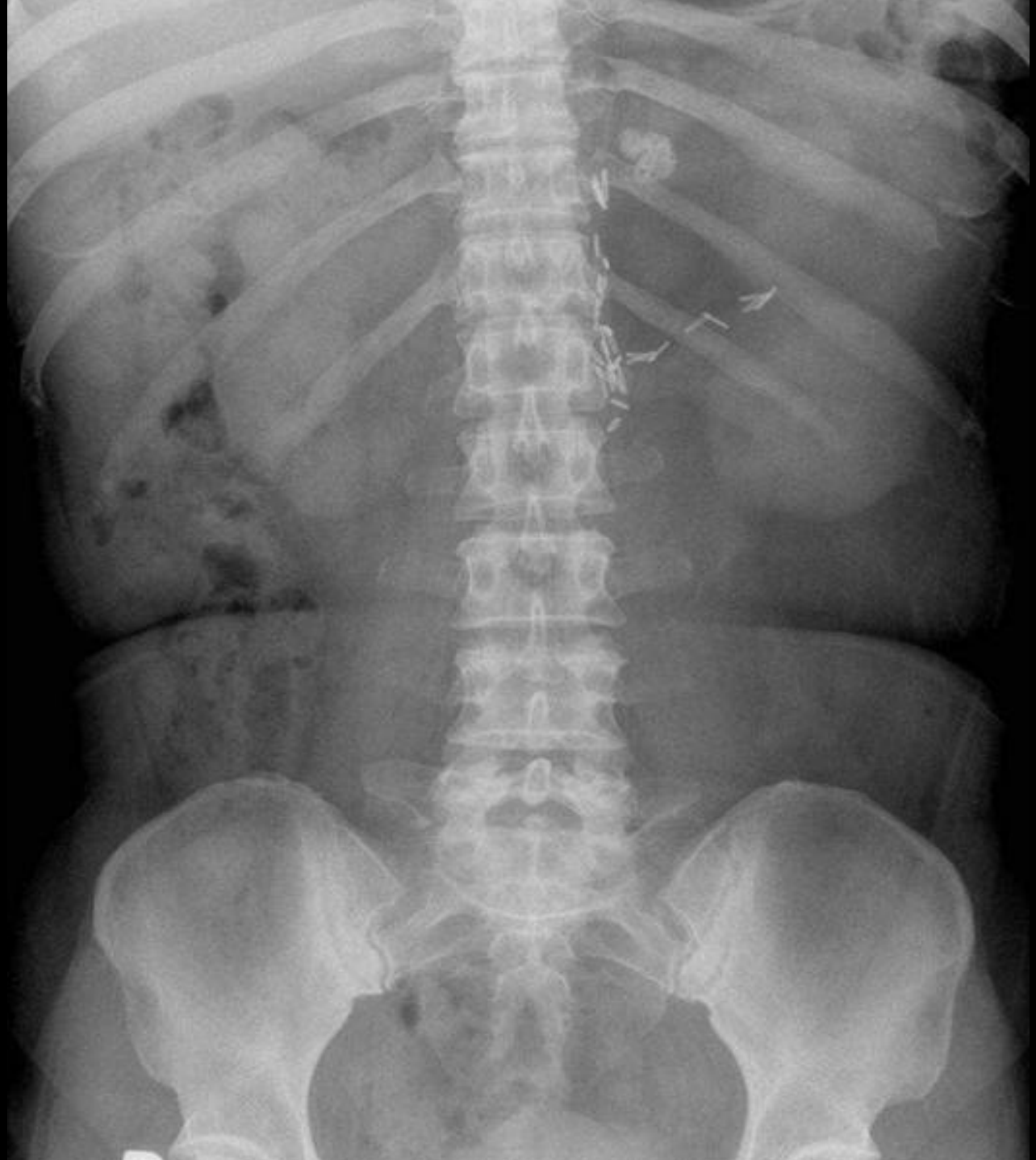
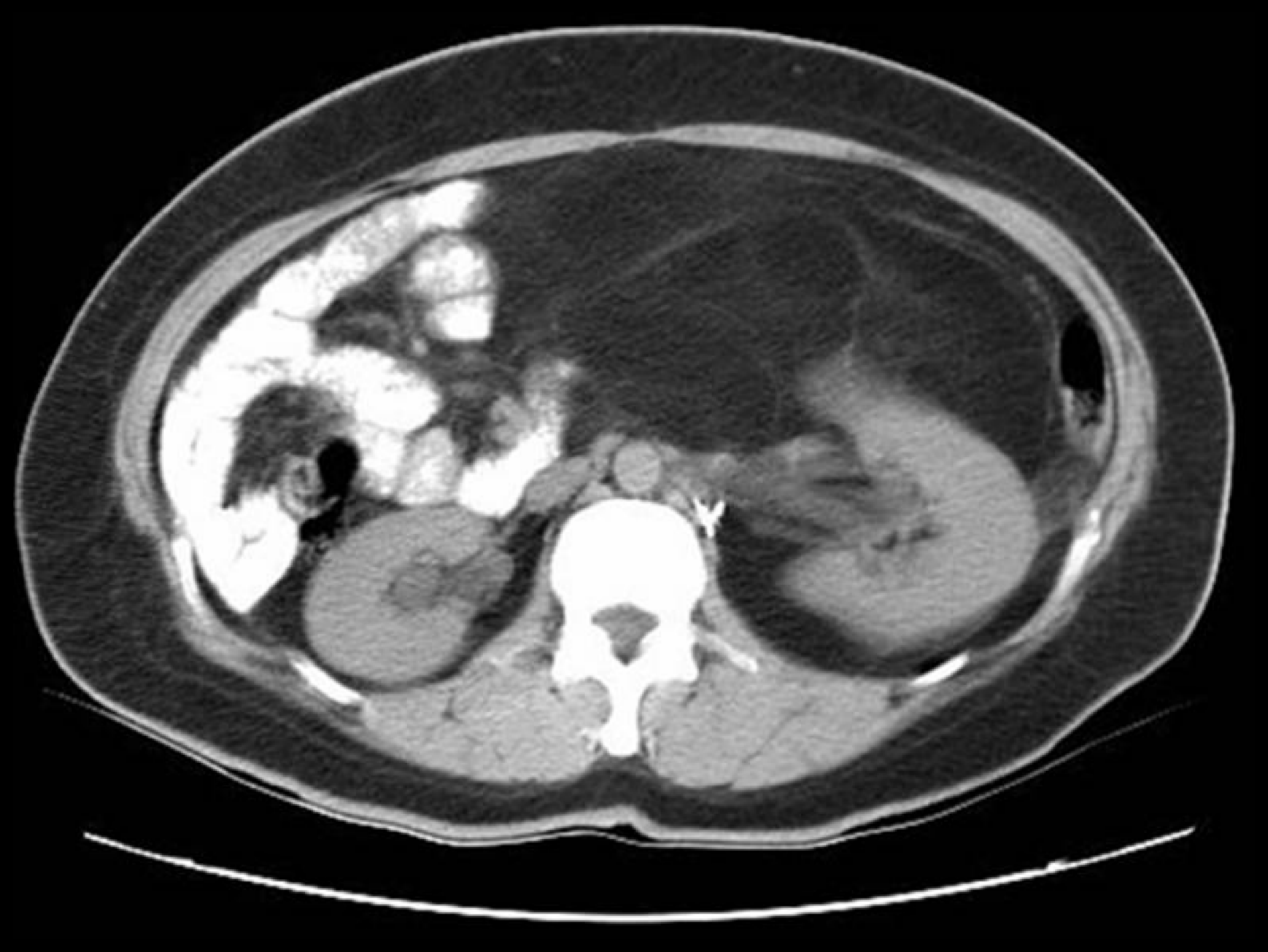
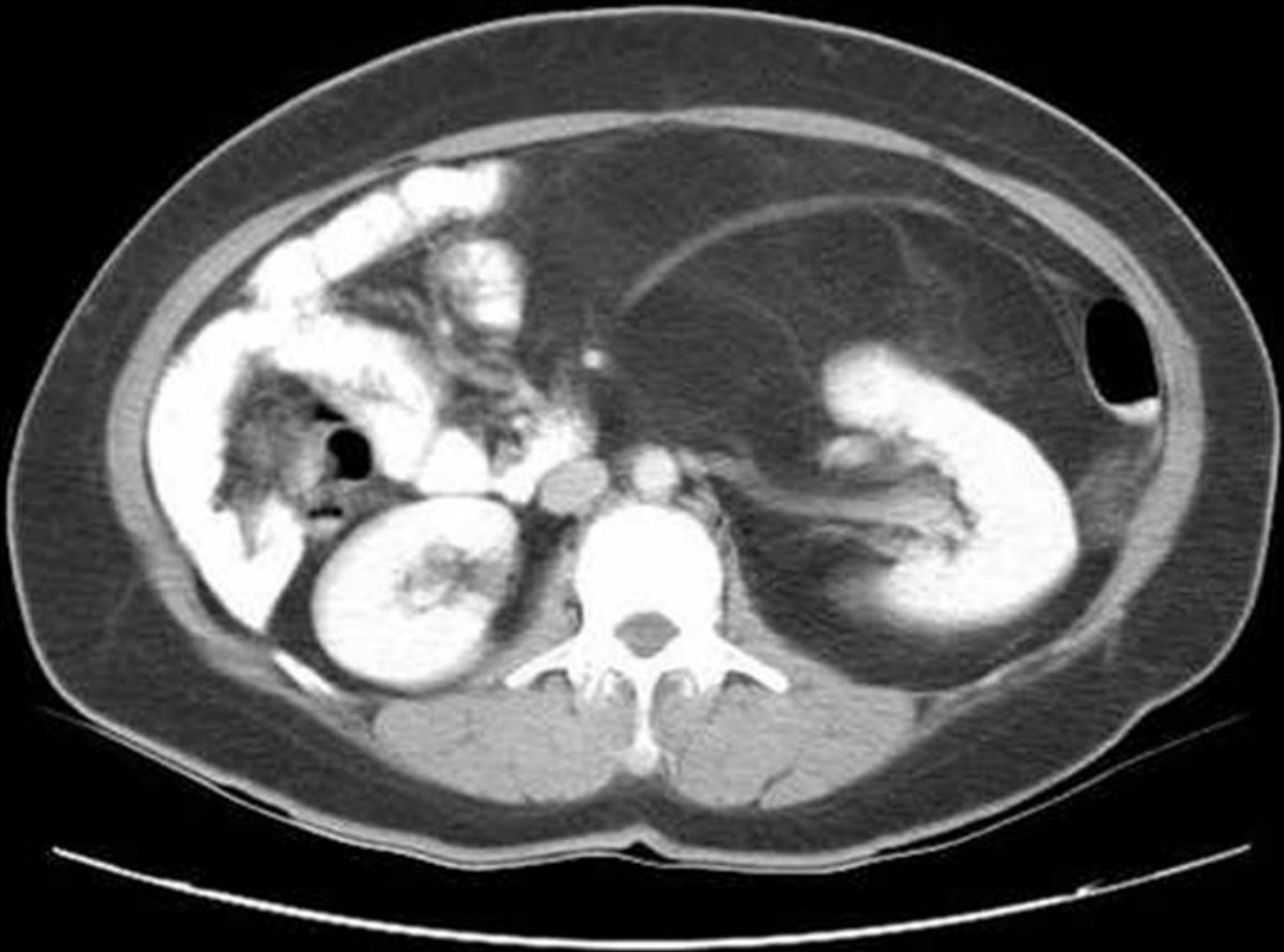
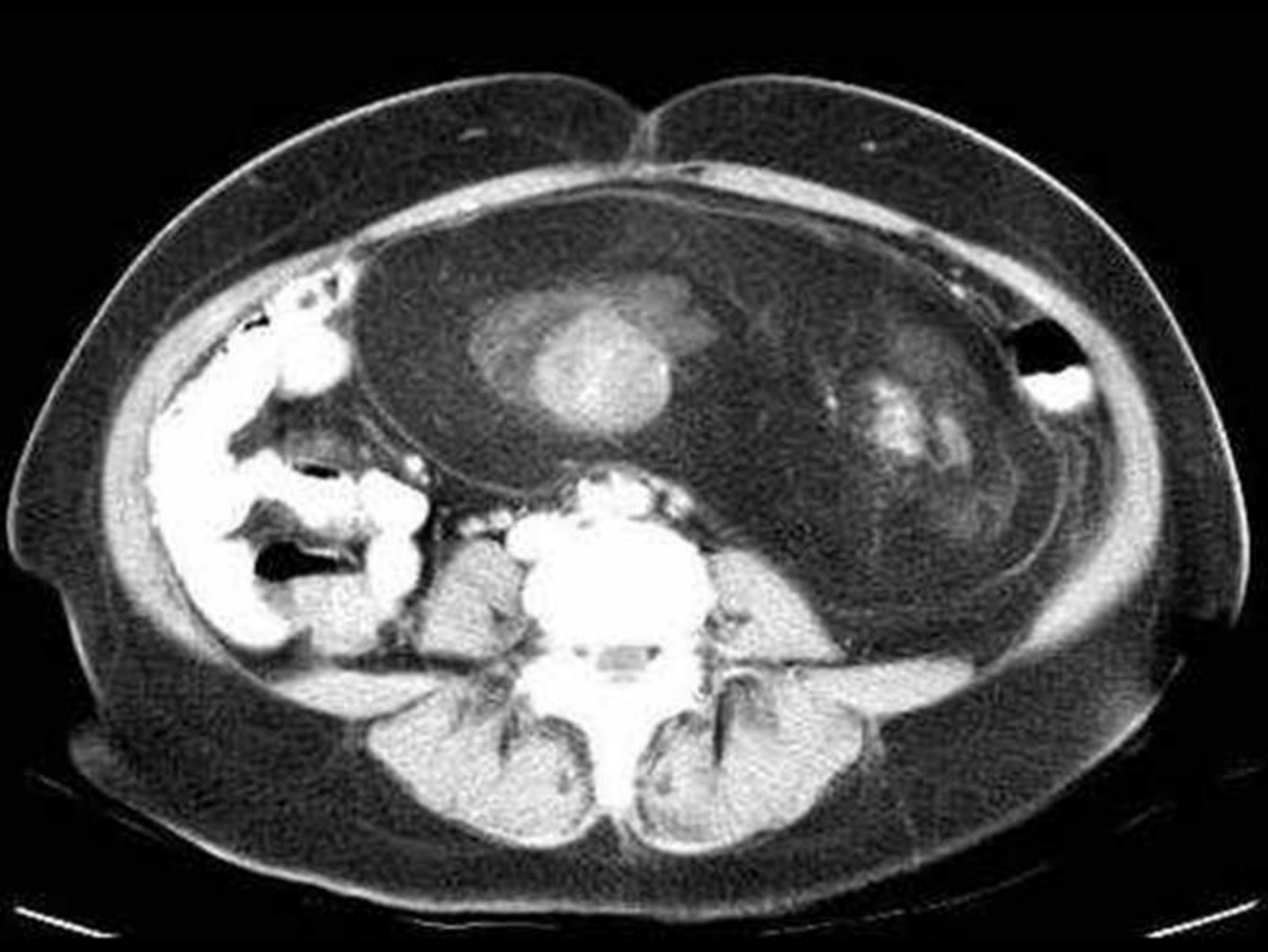


Image findings

- CXR: normal heart size, no obvious abnormal findings.
- KUB: clear psoas sign, a white solitary mass located in the left middle abdomen.







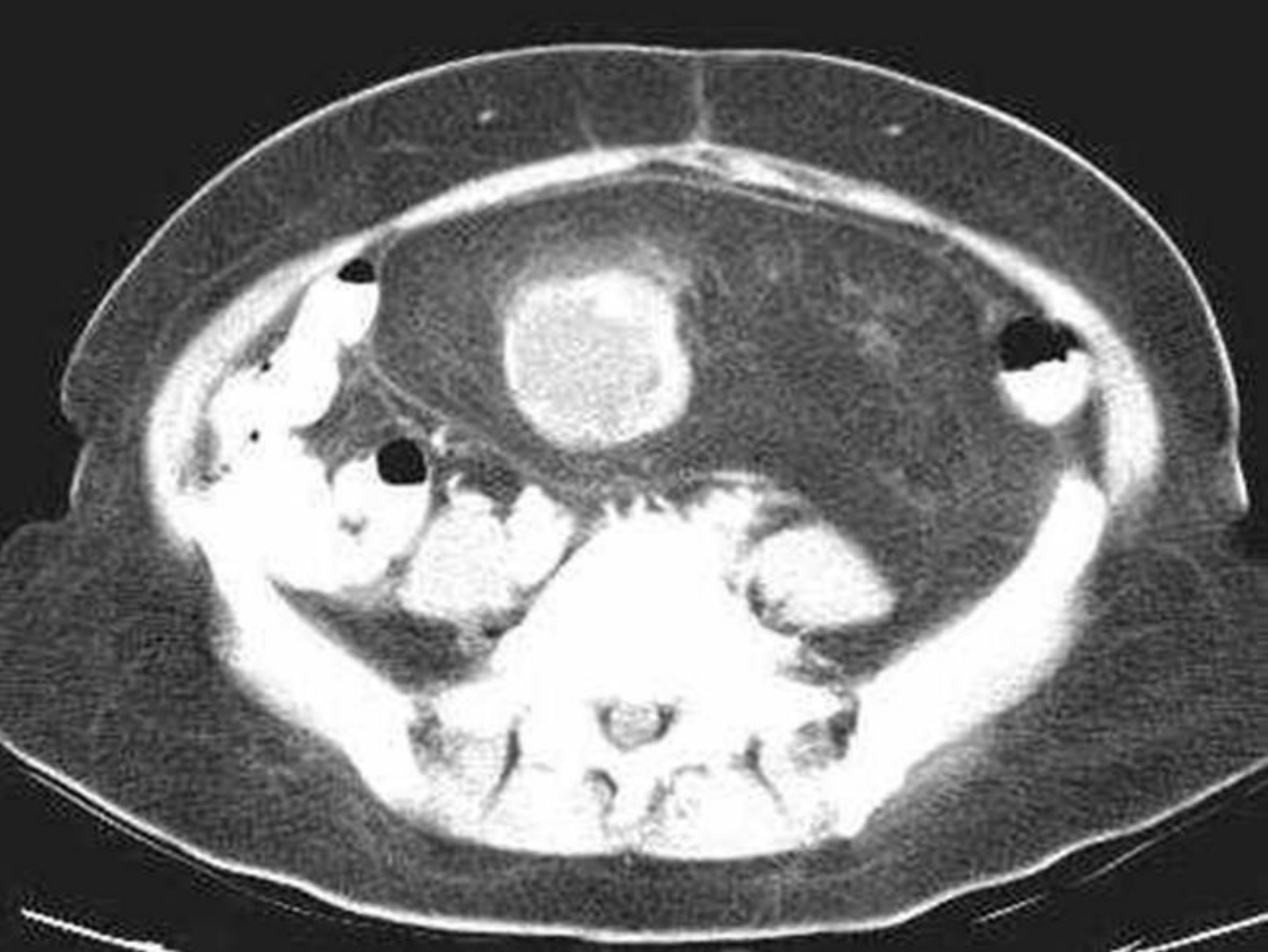


Image findings

- Metalic clips at LLQ of abdomen near the left supra renal region.
- There is a huge encapsulated mass(7*18*24 cm in size), originate from the left kidney, occupying the lower abdominal cavity. The left kidney is enclosed in the mass.
- This mass contains fat component and some moderately enhanced soft tissue components.

Image findings

- This mass has well-defined margins without apparent invasion of surrounding structure.
- The colon is pushed to the right side by the mass.
- No definite abnormal enlarged para-aortic and pelvic lymph node.

Differential diagnosis for the retroperitoneal mass

- Lipoma: although lipoma contains fat component, but it does not have soft tissue component.
- Renal angiomyolipoma: CT can optimate visualization of blood vesssels and aneurysm in the vascular phase. The tumor may be difficult to distinguish from liposarcoma, which also presents as a fat density on CT.

Differential diagnosis for the retroperitoneal mass

- Malignant fibrous histiocytoma: the retroperitoneal tumors manifest as hetergenous masses with areas of hemorrhage and /or necrosis and occassionally focal or digguse coarse calcifiction. The tumor may invade the abdominal musculature but do not invade the renal veins or inferior vena cava.

Differential diagnosis for the retroperitoneal mass

- This mass is most likely liposarcoma. It may demonstrate so-called mixed with discrete fatty areas combined with areas of soft tissue attenuation. The tumor tends to displace rather than to invade abdominal organ. After iv injection of contrast medium liposarcoma showed a varible pattern.

Operative finding

- Retroperitoneal mass excision
- left nephrectomy
- splenectomy

Pathological findings

- Grossly, the soft tissue mass measures 30 *18*12.5 cm
- Yellow lobular appearance with small foci of necrotic and fibrotic nodular change and myxoid appearance.

Pathological findings

- Microscopically, the soft tissue shows a picture of mixed-type (atypical lipomatous and myxoid tumor) and focal of dedifferentiated liposarcoma and myxoid liposarcoma.

Discussion

Liposarcoma

Liposarcoma

- Etiology: unknown
- pathogenesis: unknown
- most common primary retroperitoneal tumor.
- Rarely arise from lipoma
- 95% of all fatty retroperitoneal tumor

Liposarcoma

- 40~60 years, male> female.
- Retroperitoneal tumors occur somewhat more frequently in women.
- Usually manifest as a slow growing, deep seated, poorly defined mass.
- It has the propensity to displace rather than invade adjacent structure.

Liposarcoma

- Rare instance may be associated with pain or tenderness, early in the disease.
- The tumor is usually large by the time the patient seek medical attention.
- Five year survival rate is about 30%, radiosensitive.

Liposarcoma

- Sites for liposarcoma:
  - lower extremity: 45%
  - abdominal cavity and retroperitoneum: 14%
  - trunk: 14%
  - upper extremity: 8%
  - Head and neck: 7%

Image findings

- CT
  - contrast enhancement
  - mixed density(fat and soft tissue element)
- angiography
  - hypovascular, no vessel dilation, capillary staining, laking.