

Back pain and paresthesias after pregnancy: a spinal abscess or something more?

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LEARNING OBJECTIVES

- 1. To discuss a unique case which aims to educate clinicians on choriocarcinoma.
- 2. To recognize the importance of differentiating between metastatic spinal lesions and spinal abscesses.

CASE PRESENTATION

- A 38 y/o G1P1001 female presented to her orthopedic physician with back pain, paresthesias of the buttocks, bilateral hips, and thighs that started 3 months ago.
- The patient had a single cycle of intrauterine insemination and delivered a baby 3 months ago
- She had a spinal epidural prior to the Caesarean section without complication.
- The patient denied sexual intercourse over the past 3 months and had been taking LoLoestrin for birth control since 6 weeks postpartum.
- Her mother had primary peritoneal cancer from which she passed away from at age 60.

PHYSICAL EXAMINATION

- Tenderness of the lower lumbar spine.
- Decreased sensation along the L3 dermatome
- 4/5 hip flexor strength.

MRI

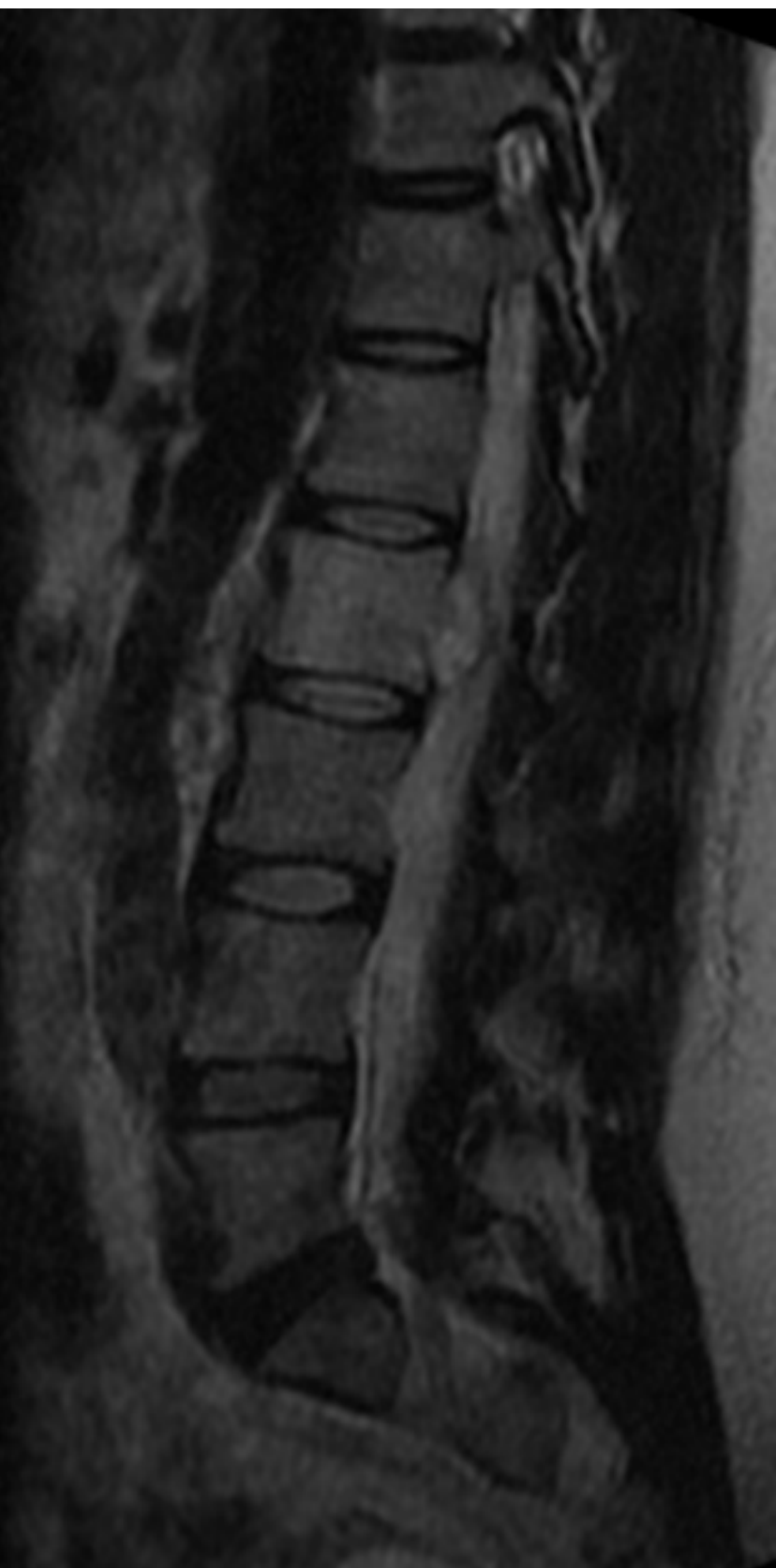


Figure 1. Patient's MRI showing an epidural mass measuring 2.4 cm x 0.9 mm x 0.6 mm behind the L2 vertebral body and a high signal area behind the uterus that could be a cyst or solid ovarian mass measuring approximately 3.6 cm.

INTERVAL HISTORY

- The concern for spinal compression secondary to a spinal epidural abscess or a malignancy with metastases to L2 was high and therefore the patient was scheduled for urgent surgery.
- Pre-operative testing on the day of surgery:

Qualitative serum pregnancy (negative)	Positive
Serum β -hCG titer	76,821.6 mIU/ml

PELVIC ULTRASOUND

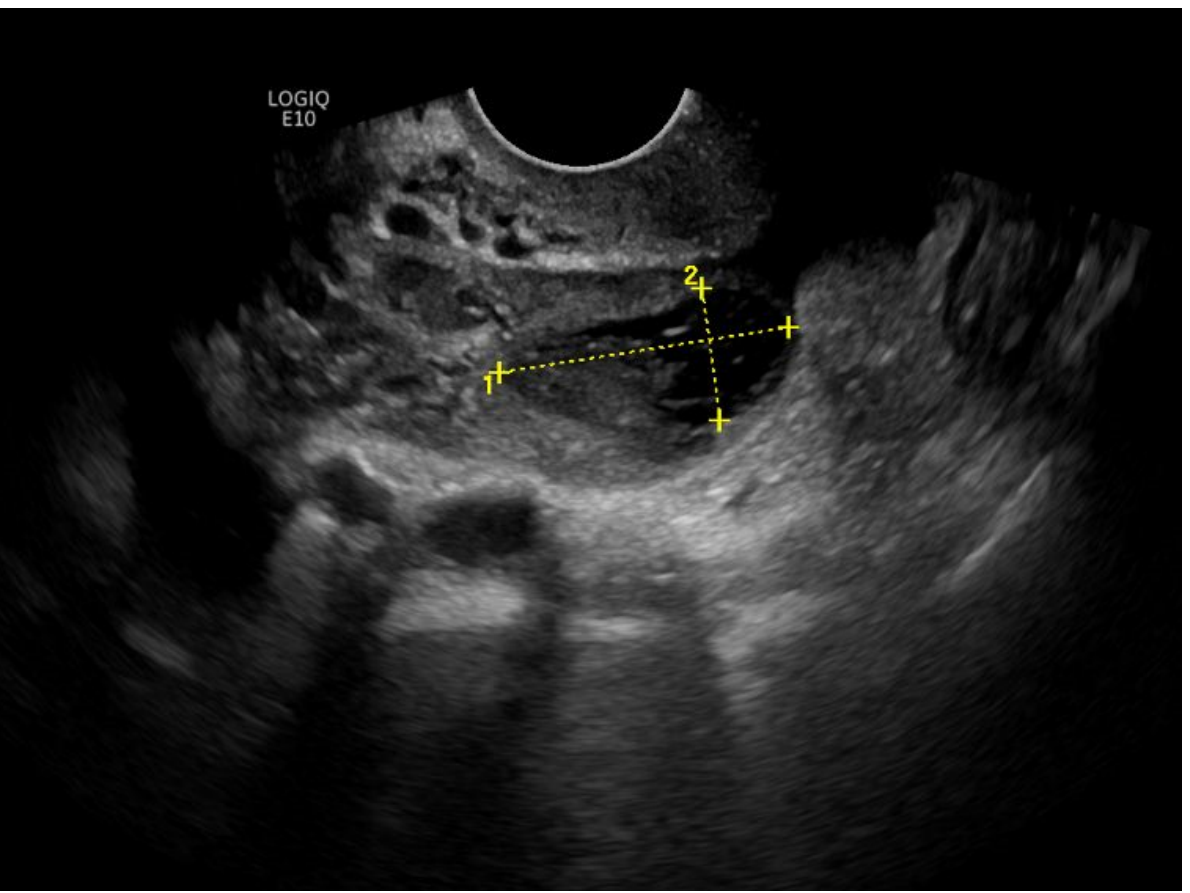


Figure 2. Complex left ovarian cyst measuring up to 3 cm and a small amount of free fluid in the left adnexa and no evidence of retained products of conception.

- A decision was made to proceed with the following surgical intervention: posterior spinal segmental instrumentation from L1-L3, a posterior spinal fusion from L1-L3, an L2 laminectomy, a complete facetectomy and decompression of the L2 epidural mass.
- The L2 epidural mass was found to hypervascular and thought to be originating from the bone, suggesting consistency with malignancy rather than infection.

CT CHEST, ABDOMEN, PELVIS

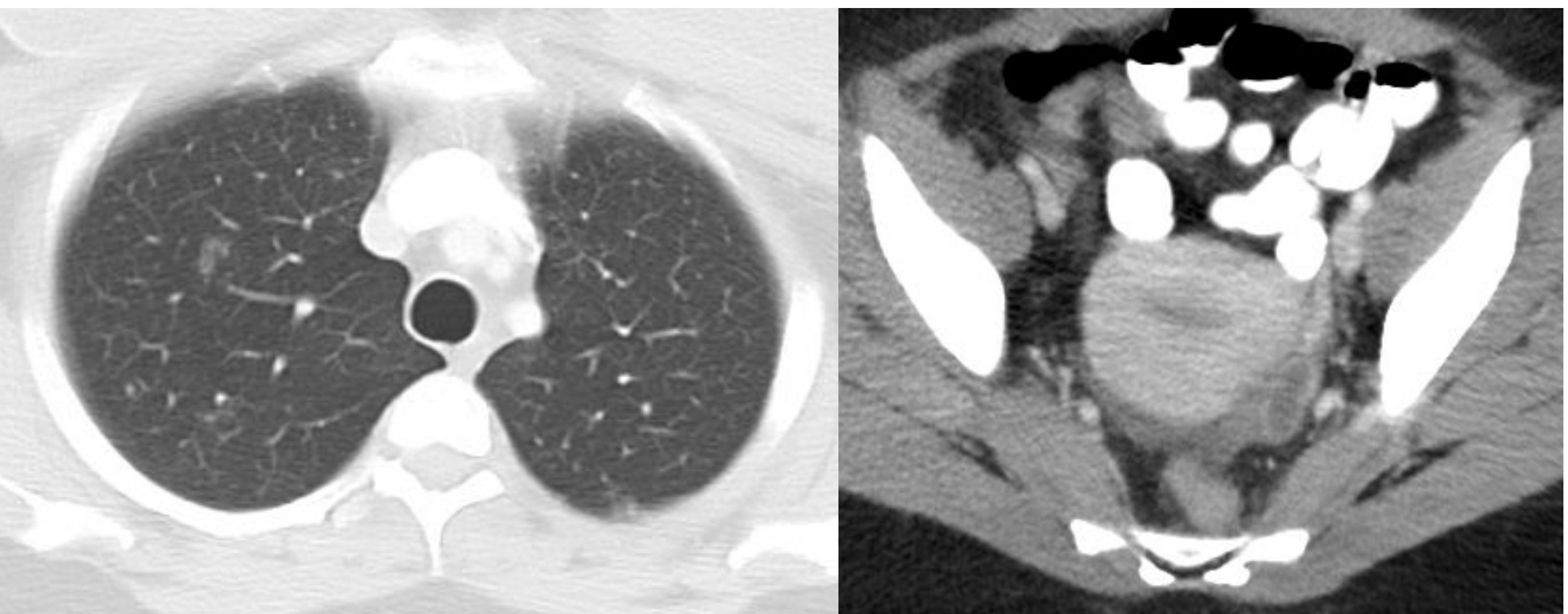


Figure 3. Multiple bilateral pulmonary nodules measuring up to 10 mm and a 2.7 x 1.3 cm rim-enhancing lesion in the left adnexa representing a hemorrhagic or involuting cyst.

PATHOLOGY

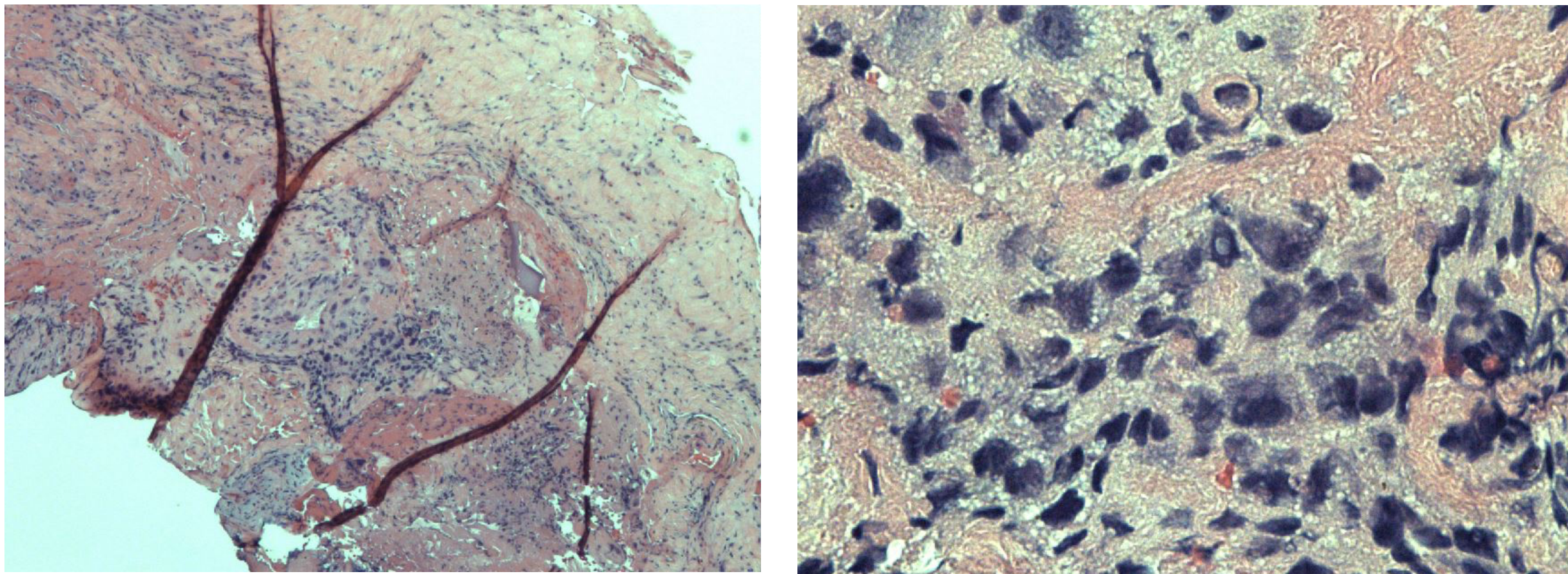


Figure 4. Small fragments of fibroconnective tissue, a tiny focus of crushed hyperchromatic and slightly atypical cells.

DIAGNOSIS

- The patient was diagnosed with stage 4 high risk gestational choriocarcinoma with vertebral osseous metastases and metastases to the epidural space.

CHORIOCARCINOMA

- A rare and aggressive neoplasm which develops when trophoblastic tissue undergoes hyperplasia and anaplasia.
- Gestational choriocarcinoma develops from a hydatidiform mole, normal pregnancy or abortion.
- The incidence is 1 in 40,000 pregnant patients.
- This is an extremely vascular carcinoma characterized by necrosis and absence of chorionic villi.
- Choriocarcinoma has a tendency to metastases; the most common site for metastases is the lung.
- High risk disease are treated with multi-agent chemotherapy, adjuvant radiation, and surgery.
- Following treatment and hCG normalization, quantitative hCG levels should be checked monthly for 1 year.
- High risk gestational choriocarcinoma has a 91-93% survival when utilizing multi-agent chemotherapy with or without radiation and surgery.

CONCLUSIONS

- Very few cases of gestational choriocarcinoma with spinal metastases have been published.
- This case aims to encourage physicians to have a high clinical suspicion for choriocarcinoma with spinal metastases in patients with recent intrauterine or ectopic pregnancy who present with back pain and paresthesias.