

UNIQUE 9-CM TUMOR THROMBUS EXTENSION TO THE HEART IN METASTATIC RECURRENCE OF ENDOMETRIAL STROMAL SARCOMA.



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ABSTRACT

51-year-old Saudi woman who presented with chronic lower back pain, which started six months ago. The patient reported occasional complaints of postural dizziness associated with Pre-syncope attacks, pleuritic chest pain, and shortness of breath. Past surgical history was notable for total abdominal hysterectomy and bilateral salpingo-oophorectomy for LG-ESS 12 years ago. The imaging findings are strongly suggestive of a metastatic **recurrence of LG-ESS with vascular invasion**. The tumor thrombus extends from the **common iliac vein** into the **inferior vena cava (IVC)** and reaches the **right atrium**, indicating advanced disease. Despite previous tumor resection, the propensity of LG-ESS for recurrence and its affinity for venous invasion is evident.

Enhanced CT performed showed an intracardiac larger thrombus within the right atrium extending into the inferior vena cava and common iliac veins. MRI showed expansion of the IVC by the filling defect with post-contrast enhancement of the tumor thrombus.

- Leiomyosarcoma with tumor
- RCC with tumor
- Uterine leiomyoma with vascular
- Primary IVC
- Bland

The patient was referred to vascular surgery as a case of intravascular mass, most likely secondary to metastatic LG-ESS. The patient underwent cytoreduction of the intravenous tumor through thoracotomy and laparotomy done by multidisciplinary team members including cardiac surgery, vascular surgery, and gynecology surgery. Final histopathology confirmed metastatic LG-ESS of the right atrium, inferior vena cava, and common iliac veins.

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1. BRIEF MEDICAL HISTORY.

51-year-old Saudi woman who presented with chronic lower back pain which started six months ago. The patient reported occasional complains of postural dizziness associated with Pre-syncope attacks, pleuritic chest pain, and shortness of breath.

Past surgical history was notable for total abdominal hysterectomy and bilateral salpingo-oophorectomy for LG-ESS 12 years ago.

2. DIAGNOSTIC HYPOTHESIS.

The imaging findings are strongly suggestive of **metastatic recurrence of LGESS with vascular invasion**. The tumor thrombus extends from the **common iliac vein** into the **inferior vena cava (IVC)** and reaches the **right atrium**, indicating advanced disease. Despite previous tumor resection, the propensity of LGESS for recurrence and its affinity for venous invasion is evident.

3. RADIOLOGICAL FINDING WITH CLINICAL OUTCOME.

Enhanced CT performed showed intracardiac larger thrombus within the right atrium extending into the inferior vena cava and common iliac veins.

MRI showed expansion of the IVC by the filling defect with post-contrast enhancement of the tumor thrombus.

4. DIFFERENTIAL DIAGNOSIS.

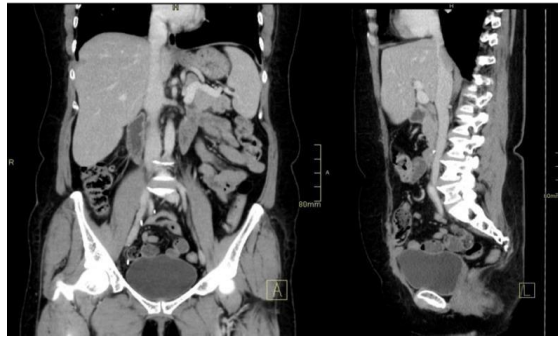
- 1- Leiomyosarcoma with tumor thrombus.
- 2- RCC with tumor thrombus.
- 3- Uterine leiomyoma with vascular invasion.
- 4- Primary IVC tumor.
- 5- Bland thrombus.

5. OUTCOME, WITH DEFINITIVE PATHOLOGICAL DIAGNOSIS.

The patient was referred to vascular surgery as a case of intravascular mass, most likely secondary to metastatic LG-ESS. The patient underwent cytoreduction of the intravenous tumor through thoracotomy and laparotomy done by multidisciplinary team members including cardiac surgery, vascular surgery, and gynecology surgery.

Final histopathology confirmed metastatic LG-ESS of the right atrium, inferior vena cava, and common iliac veins.

6. ILLUSTRATIVE IMAGES OF THE CASE SHOULD BE INSERTED, SHOWING THE RADIOLOGY/PATHOLOGY CORRELATION

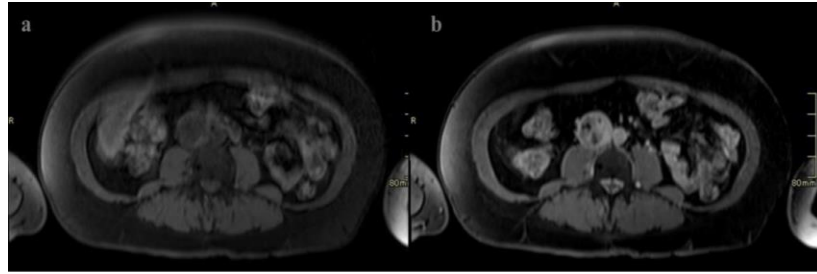


Post resection of the endovascular metastatic sarcoma

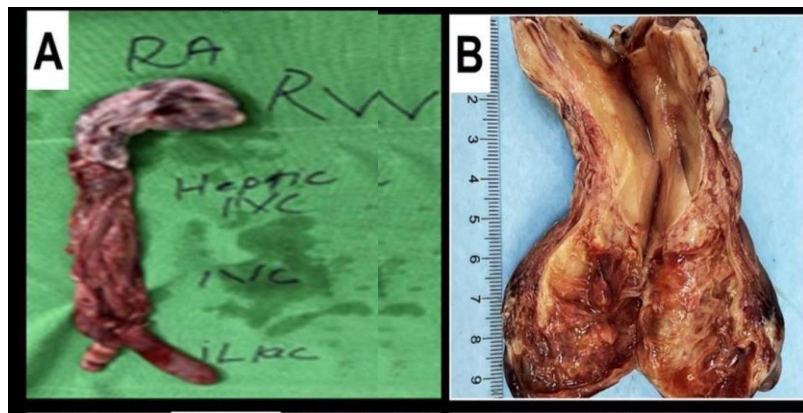


CT abdomen and pelvis confirmed the findings of thrombosis of the right

common iliac and internal iliac vessels extending into the IVC as well as extension into the right atrium.

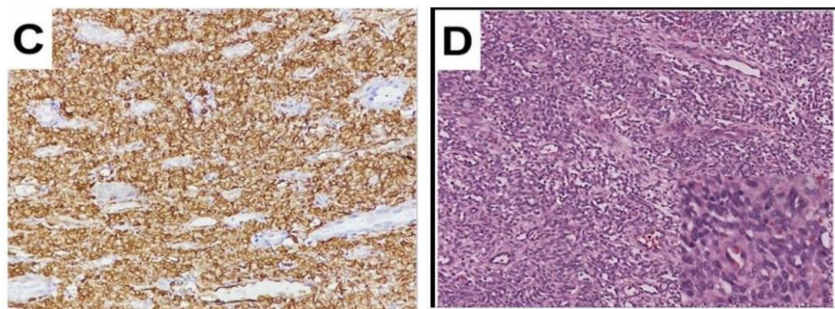


(a) T1 non enhanced MRI expansion of the IVC by the filling defect. (b) post contrast showed enhancement of the tumor thrombus.



The outer surface was tan, red brown, and congested. Upon opening, there was a heterogenous tan brown cut surface with multiple cystic areas. No necrosis was seen

7. ILLUSTRATIVE IMAGES OF MACROSCOPIC AND/OR MICROSCOPIC SHOULD BE INSERTED, SUCH AS SPECIMEN PHOTOGRAPH.



Histopathological evaluation revealed neoplastic growth composed of oval to spindle bland looking cells. Cells observed in a swirling pattern around arterioles and small capillaries. The tumoral stromal background was rich in vascular network channels.

8. CONCLUSION

- LG-ESS tumors are manifested by low malignant potential and recurrence is common, even after a prolonged period of latency.
- Approximately half of the patients experience tumor recurrence, often occurring after a considerable period of dormancy
- The occurrence of extrauterine recurrent metastasis of LG-ESS to major blood vessels is predominantly rare
- Surgery stands as the cornerstone in managing patients with primary LG-ESS.