

Introduction

- Undifferentiated pleomorphic sarcoma (UPS) has been recognized as one of the most common malignant soft tissue tumors.
- It usually affects the elderly population and involves the extremities.
- Hepatic UPS is rare. Fewer than 200 cases have been reported.
- Primary hepatic UPS occurs in late adulthood. It typically presents with a solid hepatic mass with regional lymph node involvement. Occasionally, UPS mimics hepatic infection.

Case presentation

- 44-year-old female presented with right upper abdominal pain for one week; pain described as 5/10, non-radiating and dull in nature. Associated with fever, chills, nausea and intermittent night sweats
- Past medical history: hypertension, GERD
- Past surgical history: cholecystectomy in 1998; Cesarean section in 2007
- Medications: Losartan, pantoprazole
- Vital signs: BP 147/79, HR 97, RR 18, T 36.7C, SpO2 99%
- Physical examination: positive right upper quadrant tenderness without rebound, guarding or rigidity

Workup and Follow-up

- Labs: AST 60 U/L, ALT 74 U/L, alkaline phosphate 198 U/L; AFP, CEA within normal limits
- CT of abdomen with contrast: one irregular hypodense mass at the right hepatic lobe measuring 14.3 x 11.6cm and a 2.6cm enlarged porta hepatis lymph node
- PET scan: a hypermetabolic mass with necrotic components in the liver
- Liver biopsy: hepatic undifferentiated pleomorphic sarcoma (extensively necrotic pleomorphic rounds cells with eosinophilic cytoplasm and variably sized, oval nuclei)
- Management: blood culture collected; IV fluid, empiric antibiotics given; oncology recommended doxorubicin and ifosfamide for neoadjuvant therapy
- Follow up: completed neoadjuvant chemotherapy; s/p tumor resection; follows up in clinic with regular CT abdomen scan; patient returns to work and is doing well

Discussion

- Hepatic UPS is a rare malignant mesenchymal tumor
- Nonspecific clinical symptoms, unremarkable laboratory findings, and rapid tumor growth lead to poor prognosis
- Physicians should be aware of this rare disease as a differential diagnosis for liver mass
- Surgical resection is the preferred treatment
- Chemotherapy could be used as neoadjuvant or adjuvant treatment to improve the survival rate

Images

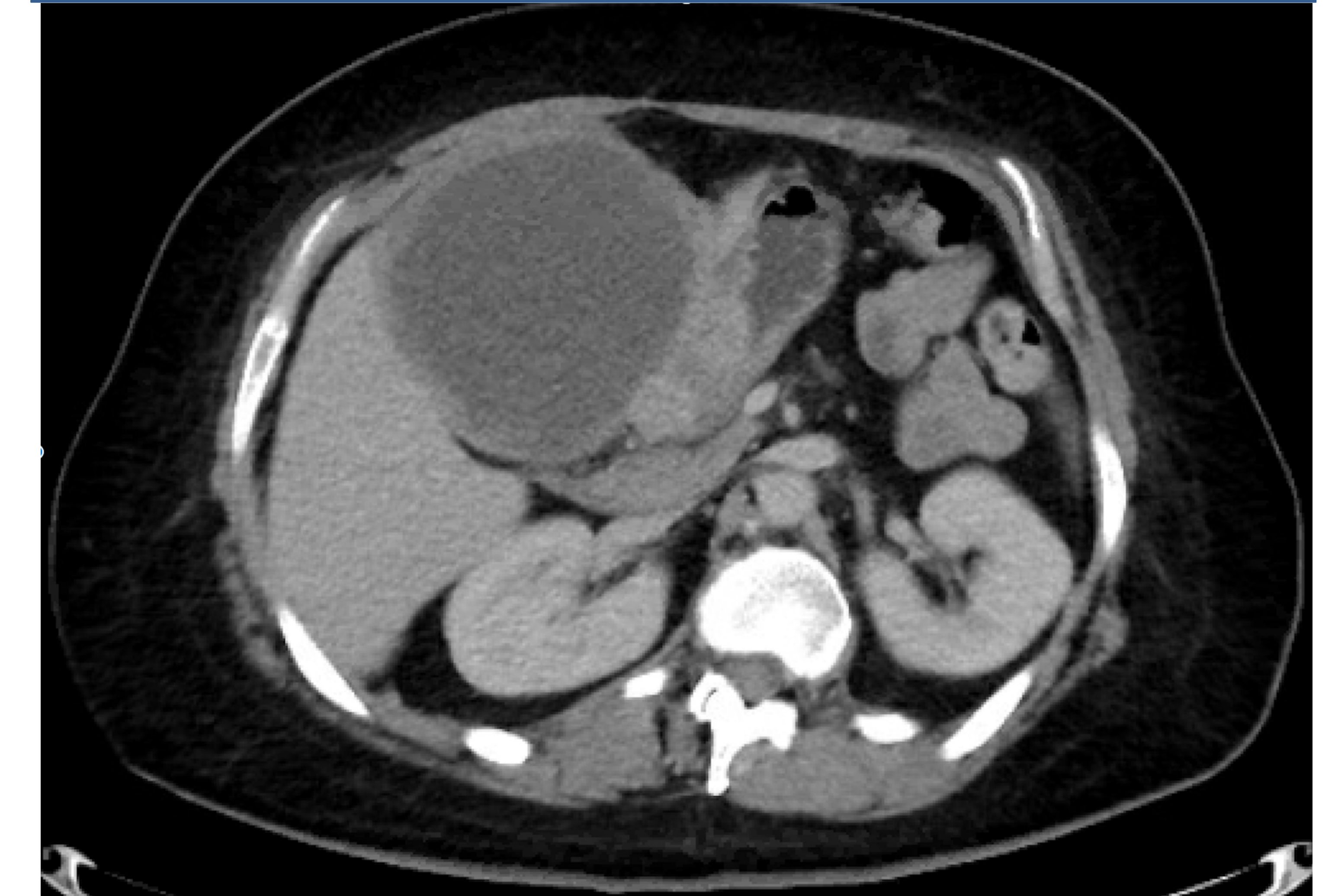


Image 1. CT of abdomen with contrast: a 14.3 x 11.6cm mass at the right hepatic lobe.

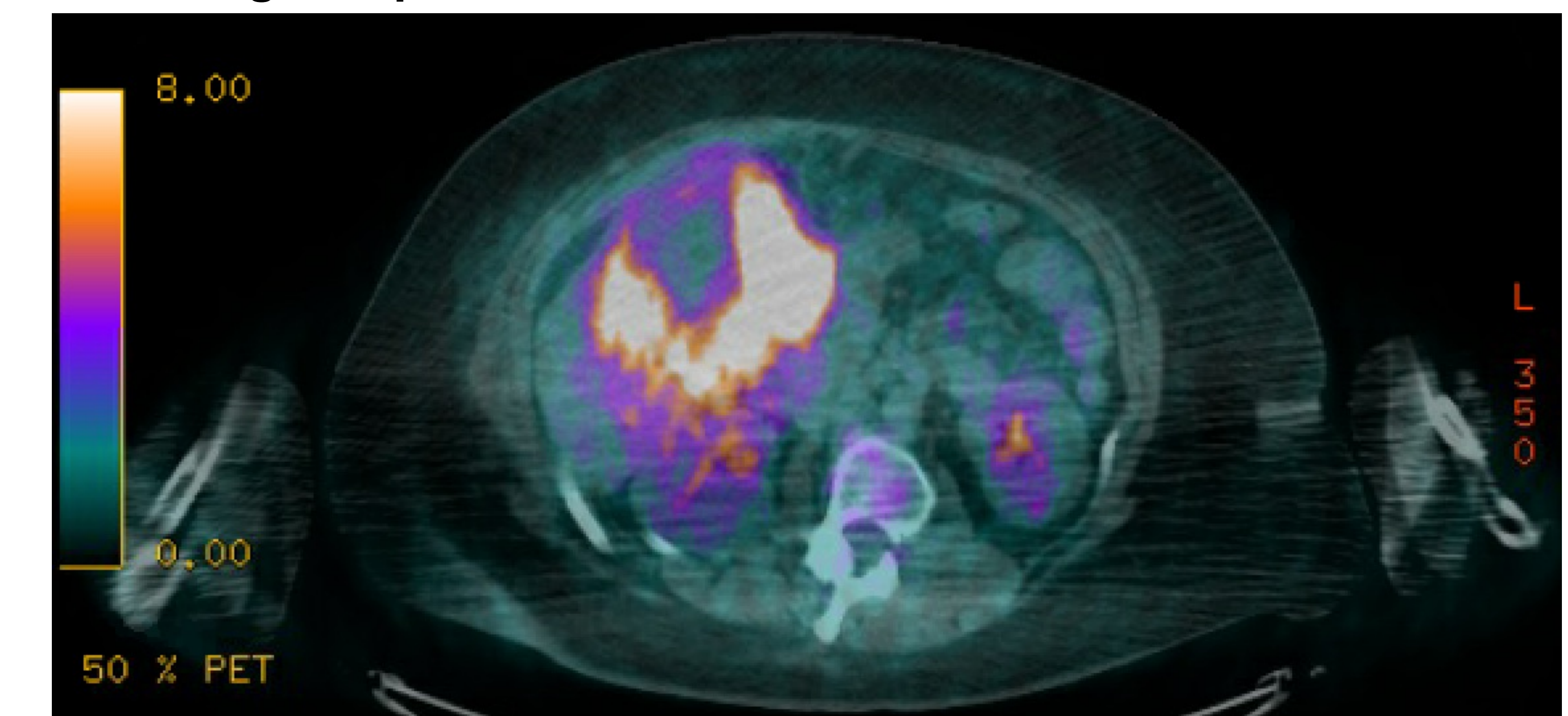


Image 2. PET scan: a 14 x 11 cm necrotic mass in the segment four liver. The mass extends to the gastric antrum/duodenum. There is uptake in the medial aspect of the mass.

Contact

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References

- Mass JB, Talmon G. Undifferentiated pleomorphic sarcoma of liver: Case report and review of the literature. Case Rep Pathol. 2018;2018:8031253
- Cao Q, Ye Z, Chen S, Liu N, Li S, Liu F. Undifferentiated embryonal sarcoma of liver: a multi-institutional experience with 9 cases. Int J Clin Exp Pathol. 2014;7(12):8647–56