68-year-old female presenting with diffuse abdominal pain

Alexandria Gonzalez, M4
Racquel Helsing, MD

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CT abdomen pelvis with IV contrast

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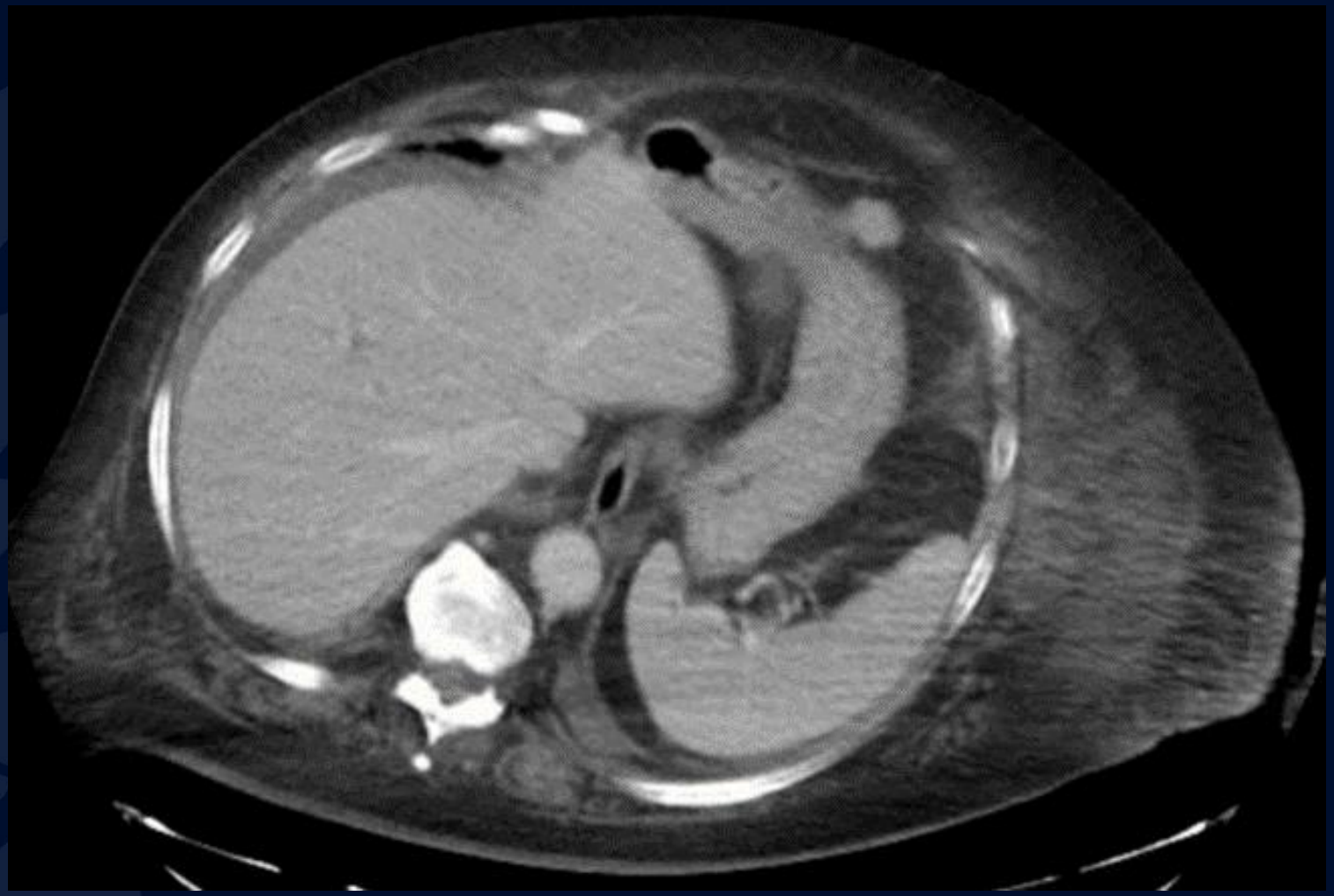
CT abdomen pelvis with IV contrast



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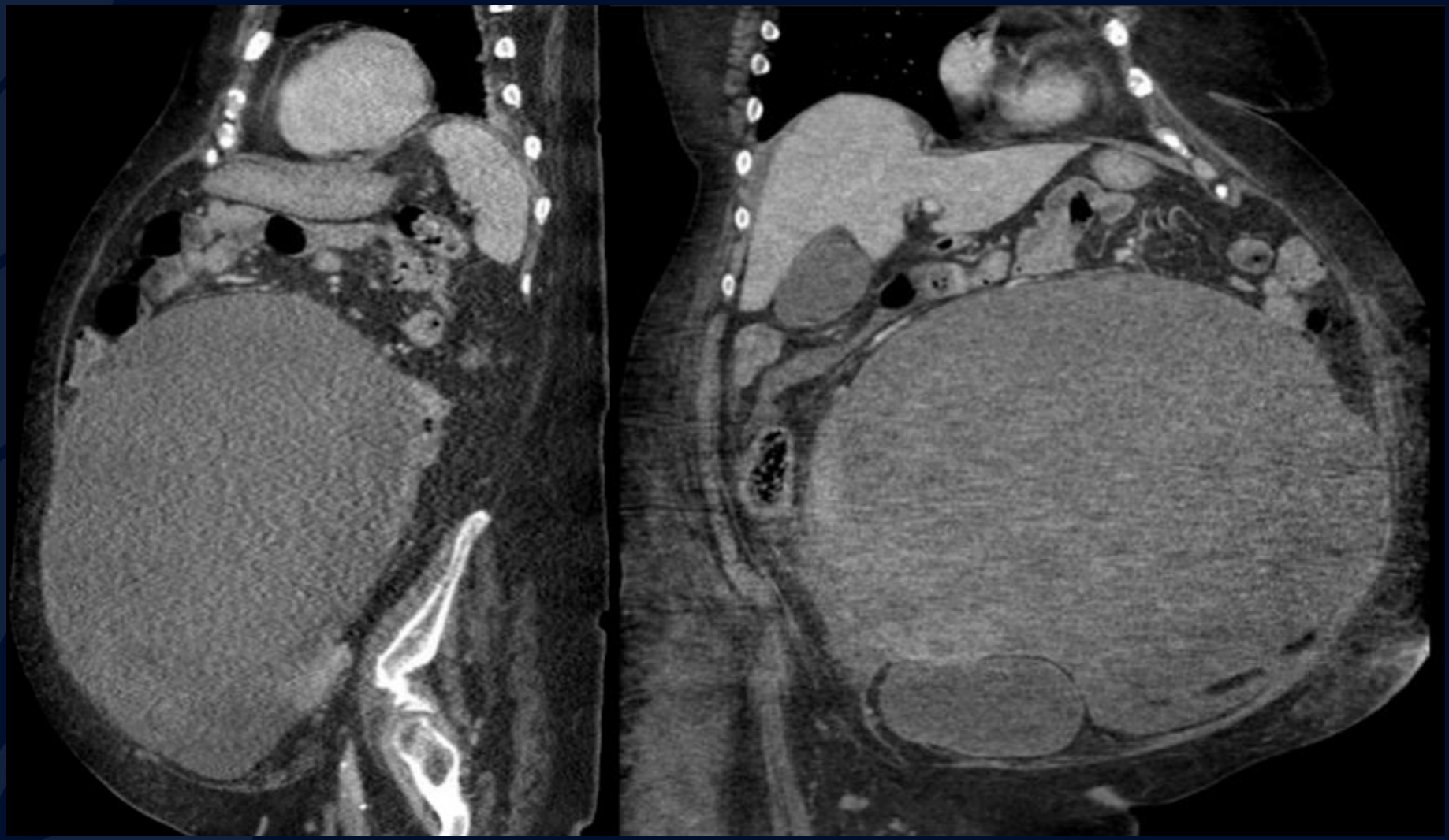
CT abdomen pelvis with IV contrast



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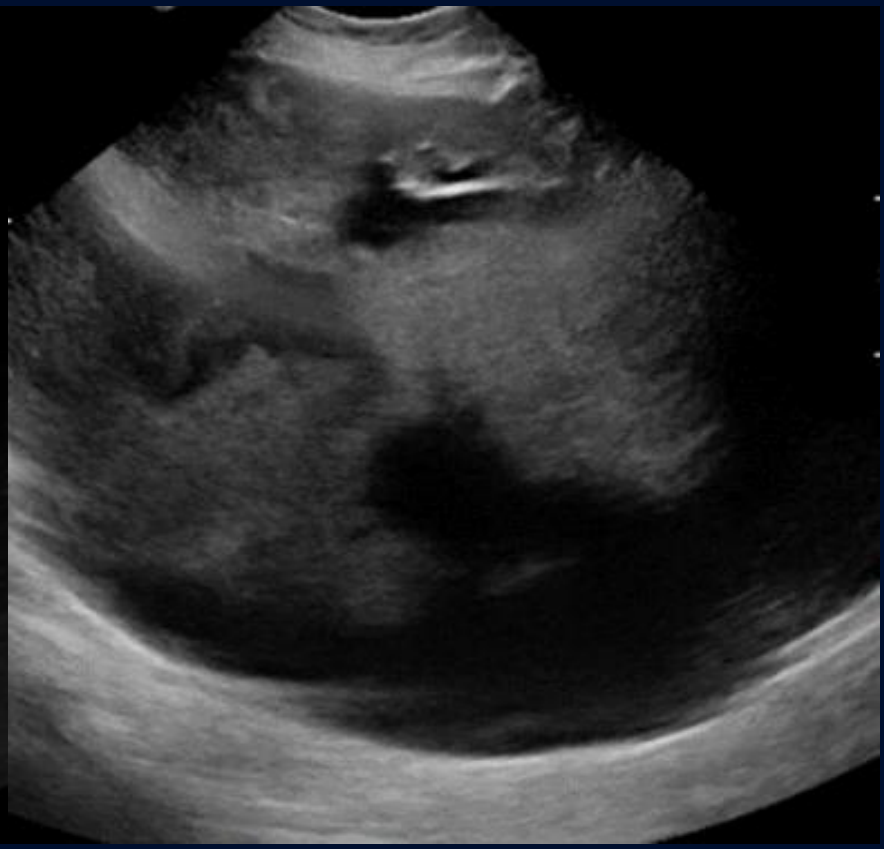
Transabdominal grey-scale ultrasound

Transverse Left Adnexa



Transverse Right Adnexa

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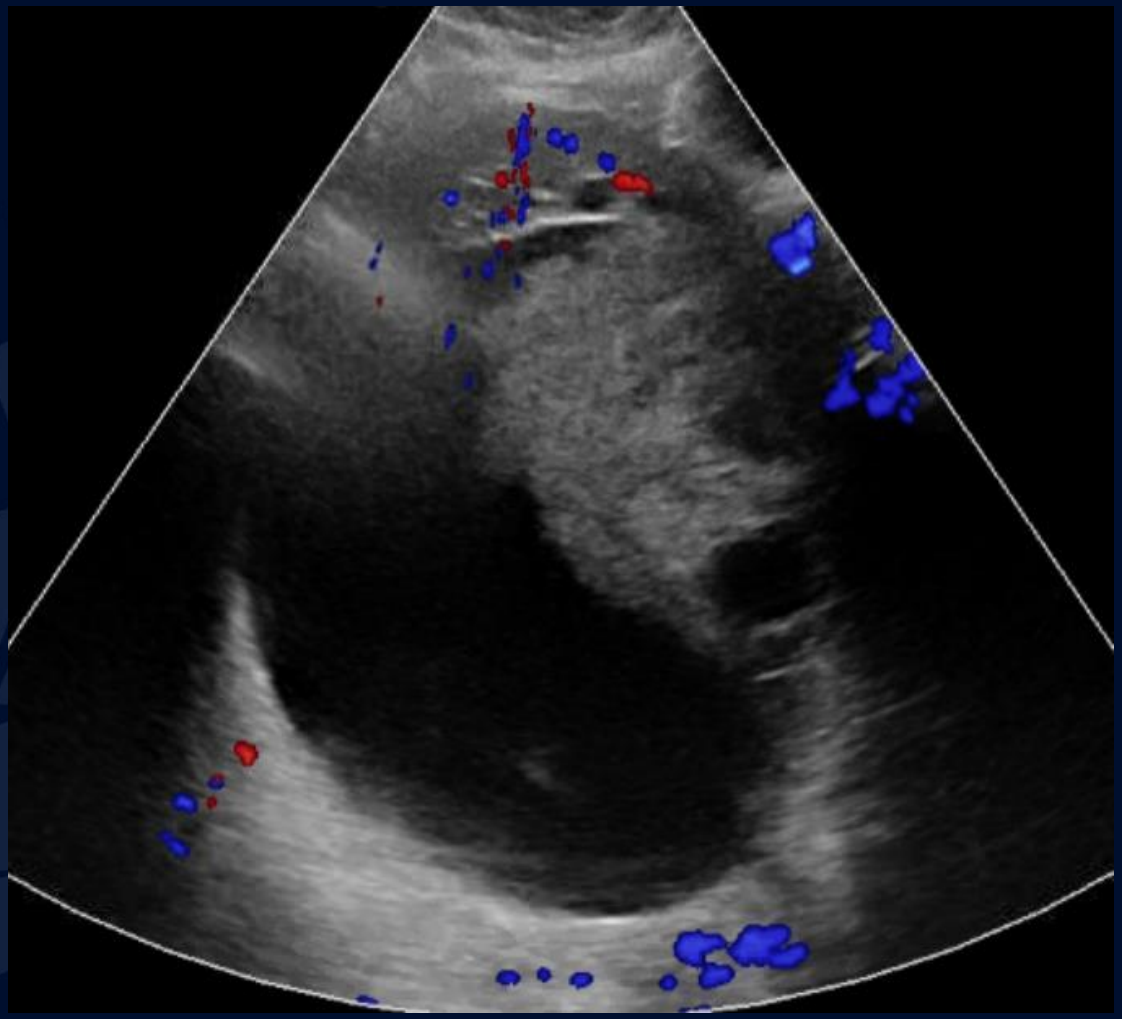
Transabdominal color doppler



Sagittal Right Adnexa

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Ovarian Mucinous Cystadenocarcinoma

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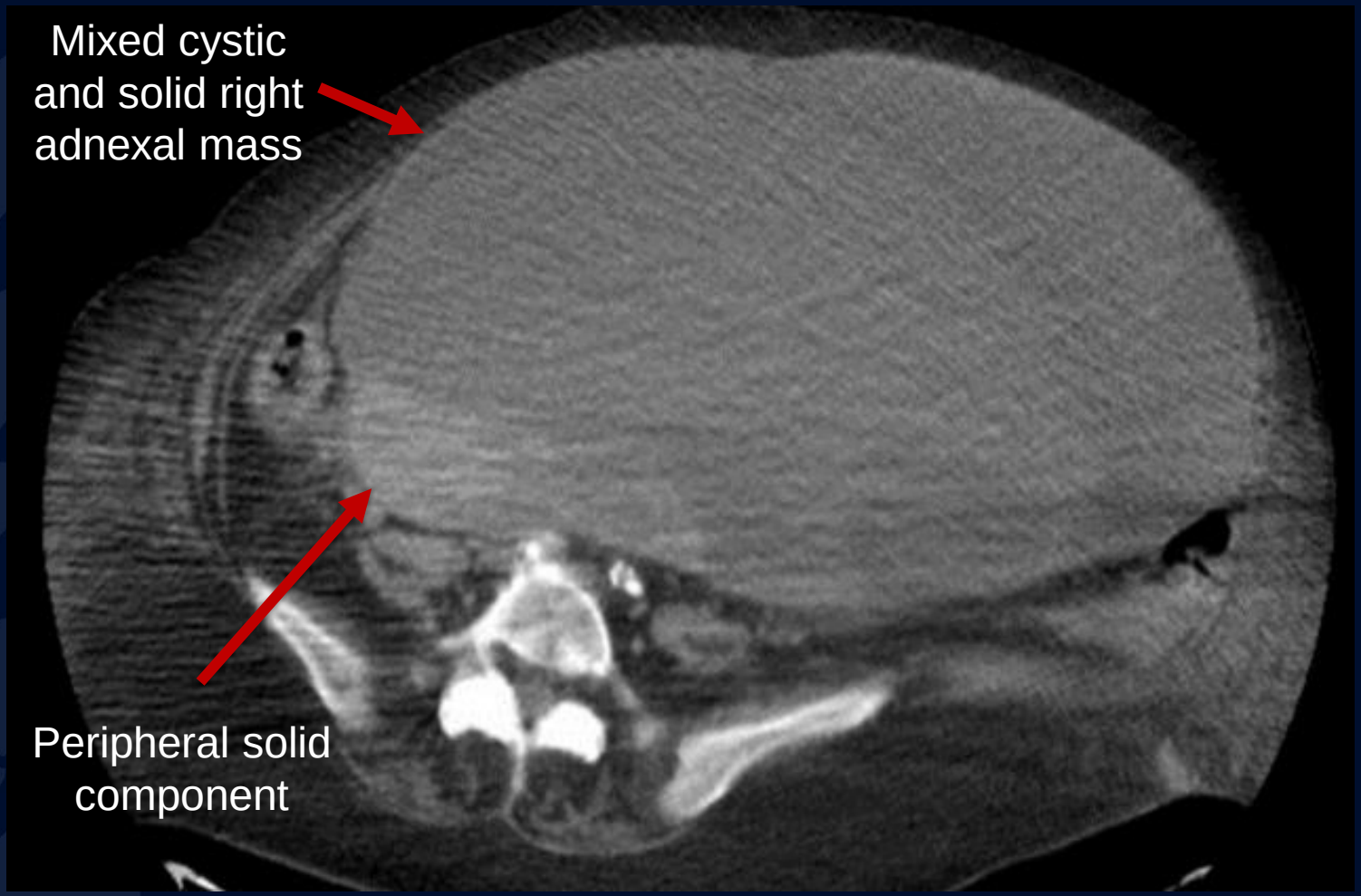
CT abdomen pelvis with IV contrast



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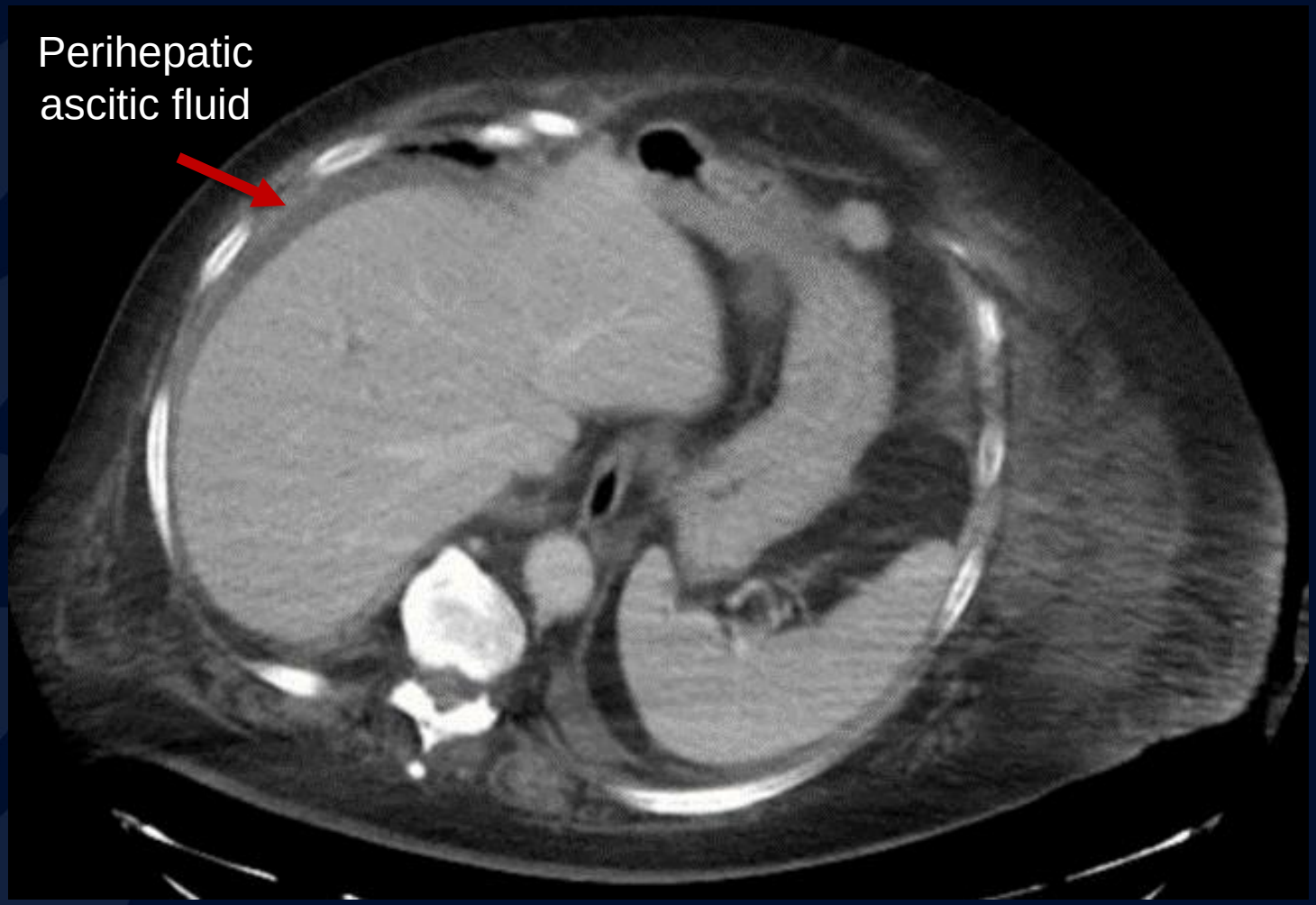
CT abdomen pelvis with IV contrast



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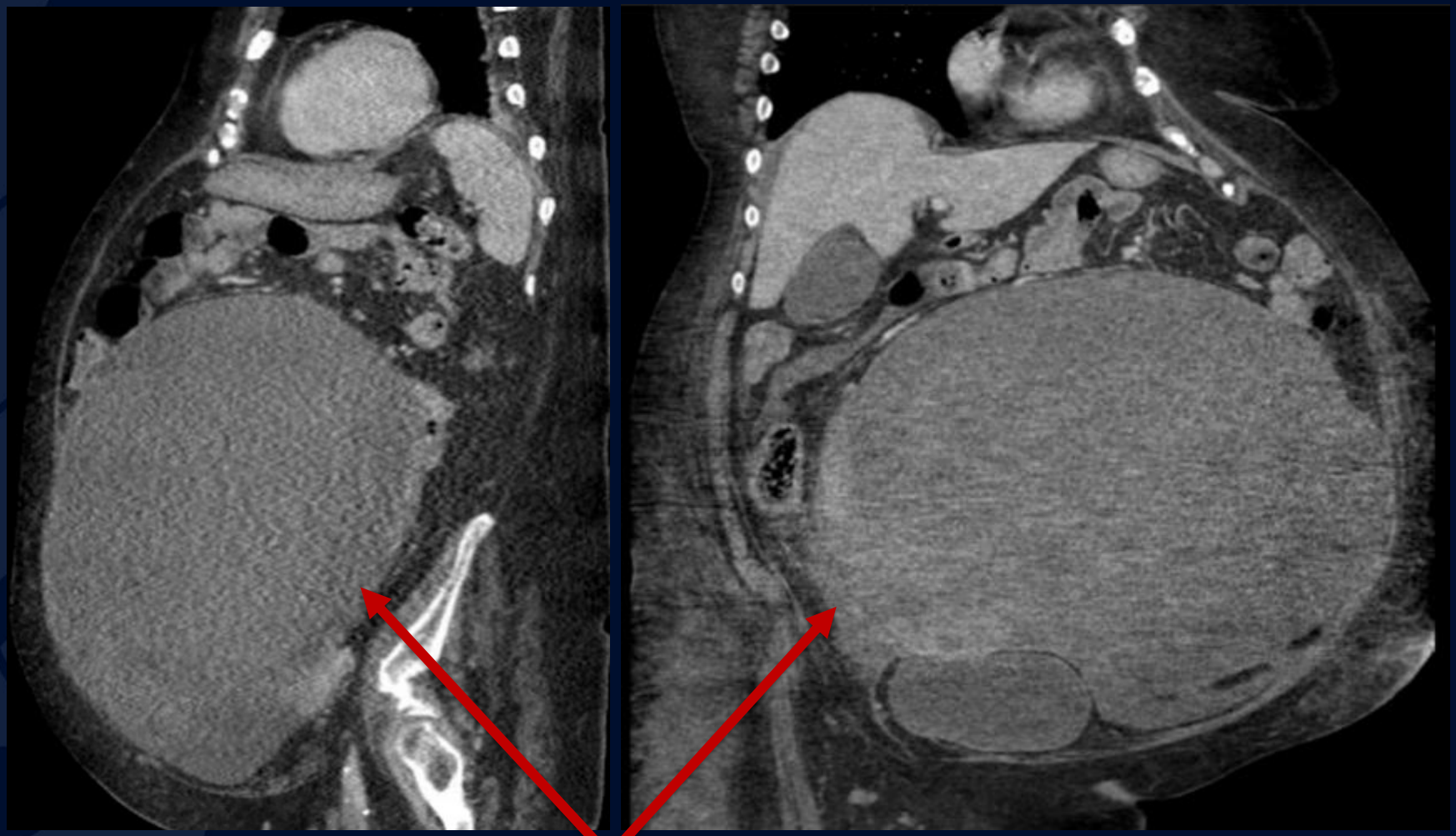
CT abdomen pelvis with IV contrast



Large heterogeneous
adnexal mass

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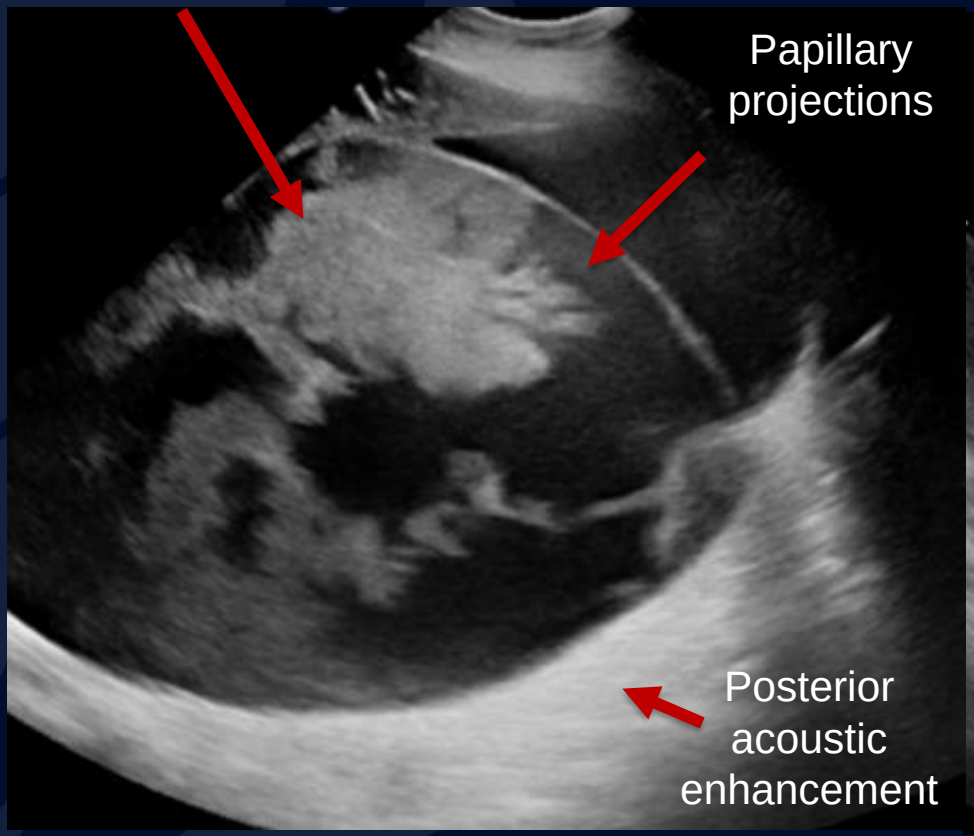
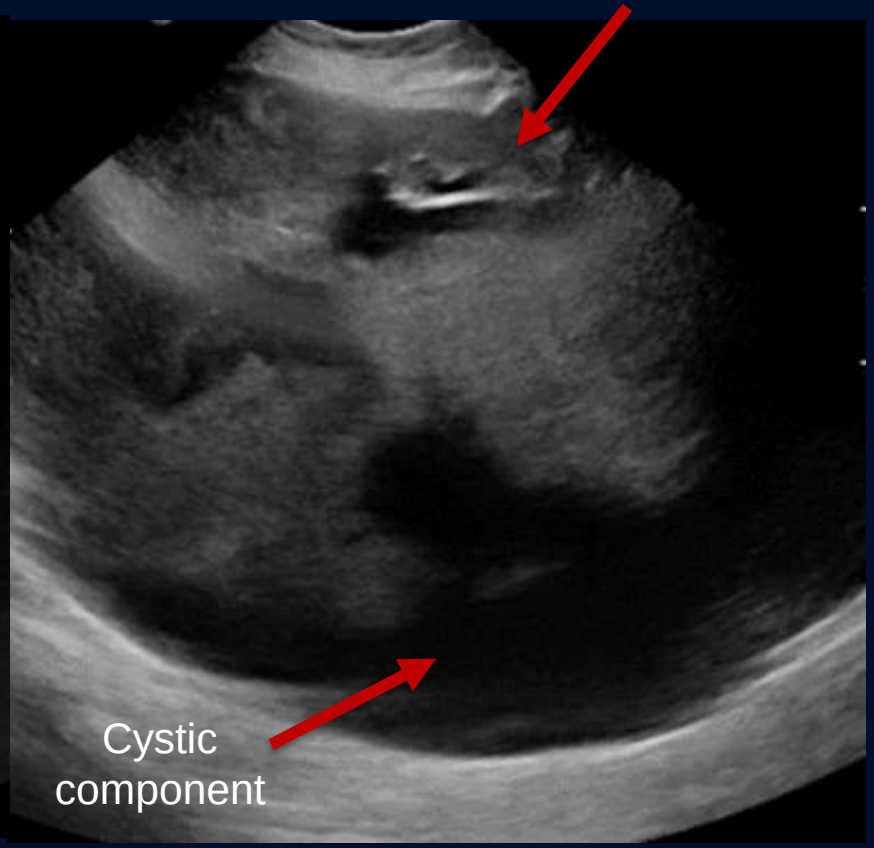
Transabdominal grey-scale ultrasound



Transverse Left Adnexa



Transverse Right Adnexa

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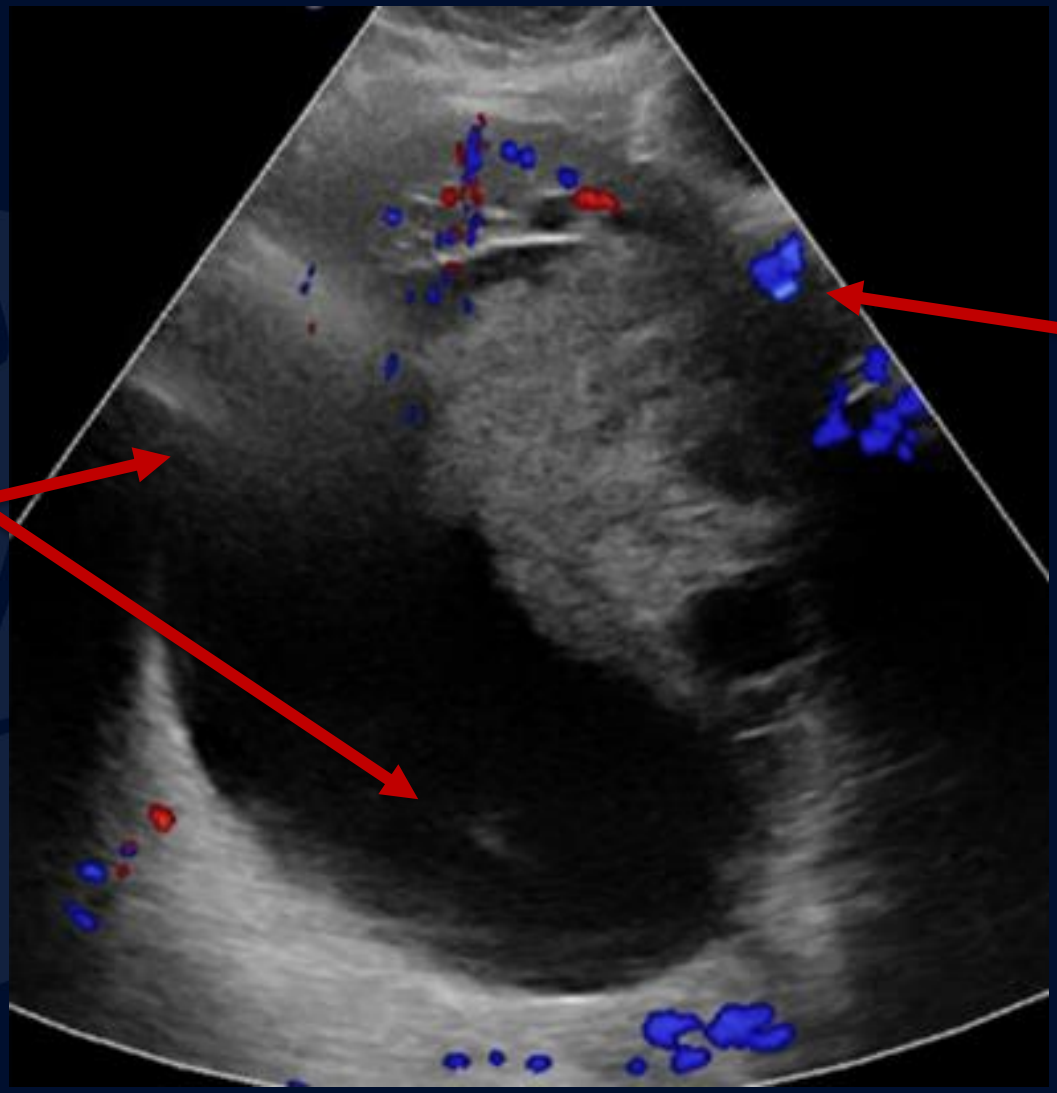
Transabdominal color doppler



Cystic component with scattered low level echos and internal debris

Color doppler flow scattered throughout solid component

Sagittal Right Adnexa

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Ovarian Mucinous Cystadenocarcinoma

Summary: Rare malignant ovarian mucinous tumor, is a subtype of ovarian epithelial tumor

Clinical pearls

- Multilocular cystic mass, usually unilateral
- Occur in peri or postmenopausal women
- Often discovered incidentally
- When symptomatic, symptoms are usually due to metastatic disease or large tumor resulting in pelvic pain, distension, constipation from compression, etc.
- Very rarely associated with transformation of a malignant mature cystic teratoma
- Cell type (i.e. mucinous) often cannot be determined based on imaging appearance, biopsy or excision is necessary

Management

- Surgical debulking may include hysterectomy, bilateral salpingo-oophorectomy, omentectomy, removal of metastasis
- Chemotherapy for patients with advanced stage disease

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Imaging Findings

Ultrasound

- Multilocular cystic mass with solid components
- Variable echogenicity, scattered low level echoes within cystic components due to mucin
- Solid papillary projections (less common than serous tumors)
- Thick irregular septations
- Posterior acoustic enhancement
- Color doppler with vascularity in solid components

CT

- Attenuation depends on mucin concentration
- Intramural calcifications (often linear) in primary mass as well as cystic metastases
- Enhancement of solid portions with contrast
- Peritoneal metastases often low attenuation or cystic; may be difficult to differentiate from fluid-filled bowel

MRI

- Signal intensity depends on mucin concentration
- Mucin filled loculi will be T1 hyperintense and T2 hypointense
- T2 hyperintense microcysts
- Large size, larger mural nodule (often >5 mm) with lower ADC values
- Abnormal ascites

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