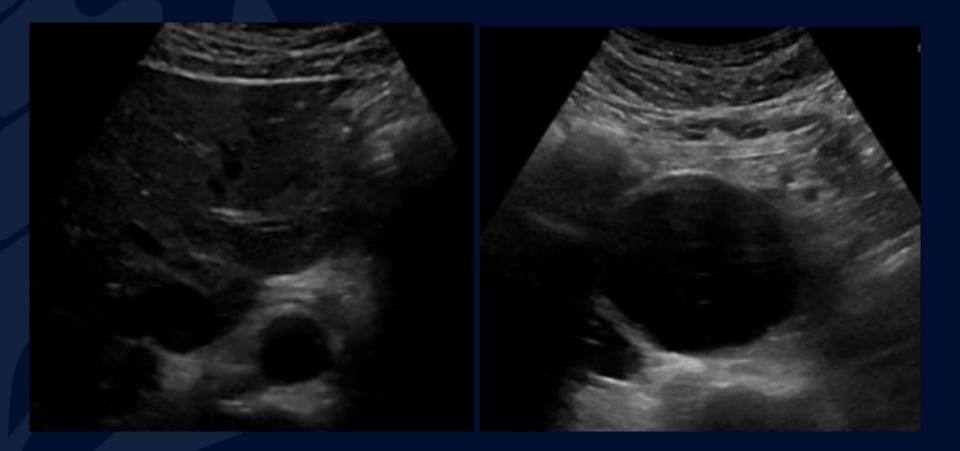
82-year-old male with a history of smoking

Maria Iannotti, MS3



Abdominal US







CT Angiography





RADIOLOGY

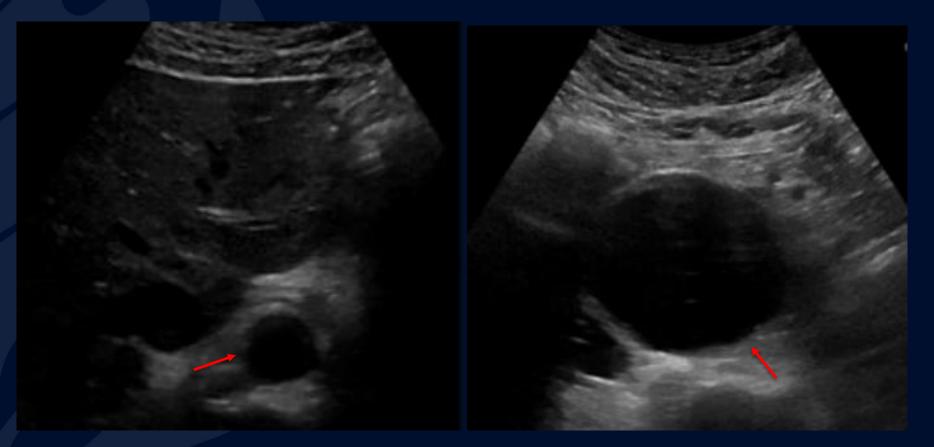




Abdominal Aortic Aneurysm (AAA)



Abdominal US



Proximal abdominal aorta

Distal abdominal aorta





CT Angiography





RADIOLOGY

Abdominal Aortic Aneurysm

Fusiform or saccular enlargement of the abdominal aorta \geq 1.5x normal diameter (> 3 cm)

Clinical presentation

- Asymptomatic
 - Majority of patients; often discovered incidentally or on screening study
- Symptomatic but not ruptured
 - Pulsatile abdominal mass, development of symptoms due to rapid expansion causing compression of surrounding structures
- Symptomatic and ruptured
 - Severe pain, hypotension, pulsatile abdominal mass
 - Pulsatile abdominal mass on physical exam



Imaging Findings

Ultrasound

- Fusiform dilation of aorta
- Anechoic lumen +/- hyperechoic thrombus
- Doppler shows turbulent flow in the aneurysm sac
- Used for first line screening and monitoring for growth

CT

- Better establishes precise anatomic location of aneurysm, helpful for surgical planning
 - Described by its relationship to renal arteries: infrarenal, juxtarenal, suprarenal
- Distinguishes residual lumen from mural thrombus
- Evaluates for rupture
- Rule out other abdominal pathology

CTA

- Defines aneurysm neck, morphology and iliac involvement
- Used to evaluate for complications and surveillance after endovascular repair



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