Educational Session: Abdominal Aortic Aneurysm Repair - Matching Patients with Approaches

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Abdominal aortic aneurysm repair: Matching patients with approaches.

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Definition: Aortic diameter at least 1.5 times the diameter of the aorta at the renal arteries. Approximately, 2 cm. <3 cm ectasia. >3cm aneurysmal

Key terms: Infrarenal, Juxtarenal
Fusiform, Saccular

Etiology: Mechanism not fully understood. Loss of extracellular matrix with an accumulation of proteolytic enzymes and cytokines that breakdown smooth muscle cells and structural proteins.

Risk Factors: Smoking-7x, increasing age-negligible under 60, male-4x, family history-4x in first degree relative.

Mortality: Rupture has an overall 80% mortality

Screening: The United States Preventative Services Task Force recommends:
Men and women older than 50 with a family history of AAA.
Men age 65 to 75 with a smoking history.
Recommends against screening women

Presentation: Asymptomatic, found coincidentally
Pulsatile abdominal mass
Rupture, abdominal or back pain
Peripheral emboli (uncommon)

Investigations: Ultrasound, CTA, MRA
AAA diameter Recommended Action
<3 cm No further testing
3-4 cm Annual Ultrasound
4-4.5 cm Ultrasound every 6 months
>4.5 cm Refer to vascular specialist

Management: <5 cm medical management
>5cm repair, growth >0.5 cm in 6 months

Surgical: Juxtarenal, Difficult Anatomy

Endovascular; Infrarenal

On The Horizon: Fenestrated Stent Graft