

Evidence Discussion (PVD 6.3)

Abdominal Aortic Aneurysm (AAA)

Abdominal aortic aneurysmal disease is usually asymptomatic and discovered incidentally. Symptomatic aortic aneurysms are at high risk for rupture with a significant mortality risk and should be treated emergently with imaging and intervention as indicated. Screening for AAA has some benefit for high risk populations including some long-term tobacco users, individuals with known thoracic or other aneurysms and individuals with certain genetic or familial syndromes.^{1,2} Individuals found to have a pulsatile mass on abdominal exam may also warrant imaging for suspected aneurysmal disease.

For chronic aneurysms, several major studies have been performed with recommendations on surveillance frequency based on rupture risk.³ Once the rupture risk of an aneurysm meets or exceeds the risk of surgical repair, intervention is recommended. Most repair approaches use endovascular techniques that require preoperative imaging with CT/MR to determine specific anatomic data for appropriate device selection.

The anatomic location of abdominal aortic aneurysms allows ultrasound to be used as a primary imaging modality in most cases for surveillance. Ultrasound uses no radiation or contrast, can be performed in an outpatient setting and is cost-effective. CT/MR imaging is usually reserved for intervention planning or for cases where ultrasound has been found to have technical limitations related to body habitus or other structural issues.^{4,5,6}

References

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