

Continued from p. 44

Diagnosis

Abdominal Aortic Aneurysm

An abnormal bulging of the abdominal aorta, called an abdominal aortic aneurysm (AAA) is a potentially serious condition that can lead to death if it ruptures. An AAA is considered present when the maximum diameter of the aorta below the renal arteries (infrarenal AAA) expands to exceed 3.0 cm. Risk factors for AAA include age, history of regular smoking, family history of AAA, coronary artery disease, hypertension, hypercholesterolemia, and cerebrovascular disease.^[1]

Radiological evaluation may include plain radiography, ultrasound, computed tomography (CT) scanning, or magnetic resonance imaging. Plain abdominal fill may show a calcified and bulging aortic contour indicating the presence of an aneurysm. Approximately 65% of patients suffered from symptomatic aortic aneurismal disease have a calcified aorta.^[2]

The prevalence of AAA found in population-based ultrasound screening studies ranges from 4.2-8.8% in men and 0.6-1.4% in women.^[3]

Rapid bedside ultrasonography is ideal for unstable patients who cannot undergo CT scanning. A technically adequate; ultrasound study has virtually 100 percent sensitivity for demonstrating the presence of an aneurysm and measuring its diameter.^[4]

In experienced hands, a transesophageal echocardiogram (TEE) may be as sensitive and specific as angiography.^[5]

References

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