

KEY NOTES

- Arterial aneurysm is defined as a permanent localized enlargement of any artery to more than 1.5 times its expected diameter
- Indications for surgical repair aneurysm > 5 cm, rapidly enlarging, symptomatic, or ruptured
- Acutely expanding aneurysms produce severe, deep back pain or abdominal pain radiating to back

BASICS

Commonest site of aneurysm. Most of the aortic aneurysms are infrarenal a swelling in the umbilical region or epigastric region and with backache. Often they contain clotted blood, and they feel firm, non-compressible, fixed and tender. Majority of cases are due to atherosclerosis.

Expansile pulsation is the characteristic feature of an abdominal aortic aneurysm which is appreciated by palpating the swelling gently all around and they do not disappear in the knee elbow position

The femoral pulses usually normal (but thrombosis or rupture of the aneurysm, giving rise to features of acute ischaemia)

Pressure effects venous oedema due to pressure on inferior vena cava, erosion of vertebrae

Aneurysms bigger than 6 cm are dangerous

When an aneurysm has leaked or ruptured the patient has the general signs of massive blood loss pallor, sweating, stertorous breathing, tachycardia and hypotension, together with abdominal tenderness and guarding.

Age:

Over 70

CLINICAL PRESENTATION

- Abdomen, umbilical or epigastric region swelling, firm, non-compressible, fixed, tender and backache
- Abdomen, umbilical or epigastric region acutely severe pain radiating to back
- Especially in elderly over 70

CLINICAL EXAMINATION

- Abdomen expansile pulsation which do not disappear in the knee elbow position
- Abdomen tenderness and guarding pallor, sweating, stertorous breathing, tachycardia and hypotension
- Abdomen, palpation swelling tender to firm pressure
- Hypertension

CAUSES

- Atherosclerosis
- Old age
- Hypertension

LAB INVESTIGATION

- Ultrasound to confirm the aneurysm and to rule out suprarenal aneurysm
- X-ray abdomen calcification or erosion of vertebrae 'Egg shell pattern' of calcification
- CT scan to demonstrate size, extent and relation to renal and iliac arteries
- Arteriography information on artery lumen caliber and branch vessel disease

TREATMENT

- Incising the aneurysm and a dacron graft is sutured end to end inside the aneurysmal sac

COMPLICATIONS

- Anterior rupture of aneurysm (20%) haemoperitoneum
- Posterior rupture of aneurysm (80%) retroperitoneal haematoma