Aortic Dissection

**Risk Factors**

HYPERTENSION (70-90% cases)

Marfans

Ehlers-Danlos

Congenital coarctation/aortic stenosis/bicuspid aortic valve

Cocaine use

Pregnancy

Giant cell arteritis

13 January 2008

12:01

**Commonest aortic emergency 3x more common than AAA rupture**

**History:**

**Pain**

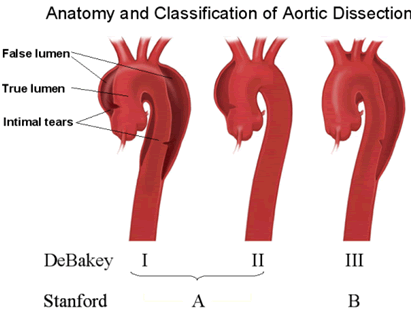
* + 90% worst ever pain
  + 85% abrupt onset
  + Tearing pain described 51%
  + Sharp in 64%
  + Maximal at onset

Risk Factors

Effect of side branches

1. Coma/Stroke(20% present)
2. Limb paraplegia

Syncope 10%



Examination

No diagnostic features

Blood Pressure maybe increased

>20 mmHg difference between arms significant

Unequal pulses seen <40%

Aortic valve incompetance 32% murmur

Horner's syndrome

Signs tamponade

Signs branch occlusion CVA/paraplegia

**Investiagtions:**

Need diagnostic if suspected Normal CXR unable Rule out

TOE/spiral CT Ix of choice in ED

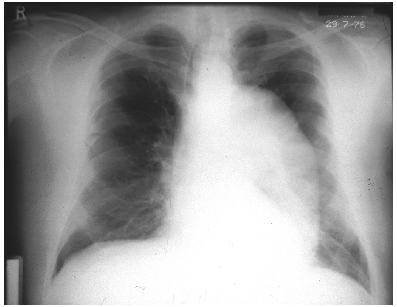
MRI has role

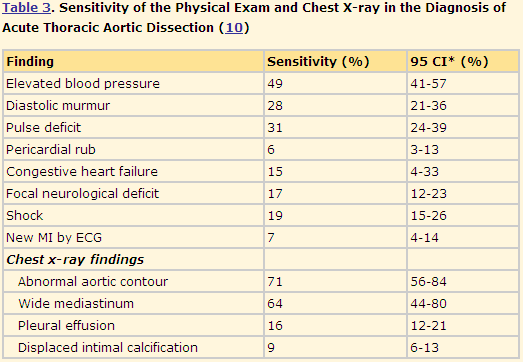
CXR multitude signs 12% normal

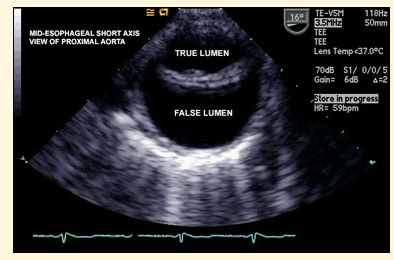
CXR signs

* + Widened mediatinum >8mm at carina
  + Calcium sign >5mm between intimal calcium and shadow outer wall
  + NG/trachea deviated to right
  + Distortion Left main bronchus
  + Double density aorta
  + Pleural effusion (left)
  + Blurred aortic knob

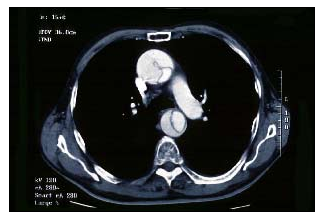
ECG may show LVH only 0.9-2.4% have ECG changes of AMI 10-40% some ischaemic features







TOE



Intimal Flap ascending and descending aorta

Treatment

Reduce afterload and force of ventricualtr contraction aim

B Blockers treatment of choice

Aim HR 60-80 SBP 100-120

Sodium nitropusside alternative

Also GTN but may get reflex tachy so give B blocker as well

Analgesia

Iv access arterial line

Surgery Type A

Medical Type B surgery if leaking/failure medical therapy

One year survival 50-70% Type A

70% type B