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