Examples of considerations in assessment of acute chest pain

Assessment of the resident with chest pain

Table 1: Examples of considerations in assessment of acute chest pain

Assessment features		**Cardiac ischemia**	**Aortic dissection**	**Pneumonia**	**Pulmonary embolism**	**Traumatic pneumothorax**
Pain features	**Onset**	Gradually increases in intensity over minutes	Sudden	Gradual	Sudden	Commonly post-trauma e.g. fall
	Location	Left or central chest	Central chest	Left or right	Left, right or central	Left or right
	Radiation	To both arms or neck or jaw	To back +/- to legs	Nil		
	Duration	A changing pattern of pain over the prior 24 hours	Constant	Hours to days	Hours to days	Most commonly post-fall or trauma
	Character	Similar to episodes of prior cardiac ischemia; pressure-like pain	Sharp, tearing or ripping	Pleuritic (worse on inspiration), sharp		
	Aggravating / relieving factors	Worse with exercise; relieved with rest	-	Worse with inspiration / coughing		
Associated symptoms		Diaphoresis (sweating) Nausea / vomiting	May have syncope or focal neurological deficits	Shortness of breath		
				Fever	Calf pain	Focal chest wall tenderness
				Cough	Hemoptysis (coughing up blood)	
Risk factors		Peripheral arterial disease;	Hypertension Bicuspid aortic valve or aortic dilation	Poor swallow; immune compromise; advanced dementia	History of PE or DVT; active malignancy; immobilisation	History of trauma or underlying pulmonary disease (e.g. asthma / COPD)
Examination findings		Diaphoresis	Extremity pulse or blood pressure difference	Fever	Tachycardia	Tachycardia
		Tachycardia / bradycardia		Friction rub	Tachypnoea	Tachypnoea
		Bi-basal crackles		Focal chest signs	Asymmetric leg swelling or calf tenderness	Reduced air entry on side of pneumothorax
		Examination can be normal				