Acute coronary syndrome
Paramedic case studies #1

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Past history
You are attending a 60 year old man who is a heavy smoker and beer drinker. He has been c/o aching epigastric pain with exertion over the last few months. He doesn’t like to visit the doctor very often but has been told that he has moderate hypertension that he will likely soon have to take medication for if he doesn’t change his lifestyle. He has not had his pain diagnosed but on the most recent mention of it to his doctor the possibility of him having gastritis or even an ulcer was mentioned given his drinking.

Today
He was mowing his lawn outside when he had a sudden onset of chest pain and breathlessness. He came inside and is now sitting on the couch. His wife called for ambulance help.

On examination
CNS  GCS=15 alert and oriented
CVS  pale cool clammy P=60 BP=140/90
Resp  16 c/o breathless feeling, nil dyspnoea evident, on ausc chest clear L=R
Chest c/o aching feeling in his epigastrium, not radiating, not changed by position, movement or deep inspiration
GIT  c/o nausea, nil vomiting, nil epigastric pain
ECG  sinus rhythm, ST elevation leads II and III
Pulse oximetry 95%

Working assessment
Acute coronary syndrome, suspected AMI

Management
Discuss reasons for default payoff to cardiac until proven otherwise. Revisit the case study to explore what presentation changes would be required to make this not cardiac such as previously clearly diagnosed (unlike this) or clearly pleuritic compared to visceral nature pain (unlike this) or clearly traumatic (unlike this). Emphasise rule out rather than rule in cardiac diagnosis.
Oxygen – related to pulse oximetry so not required (discuss breathless/SOB versus dyspnoea)
Aspirin – reasons why? When not to? What if already on daily maintenance dose?
Nitrates – reasons why? When not to? Modification for hypotension, rhythms, inferior MI with right ventricular involvement (applicable here)
Opioids – what risks are there? When is it needed? i.e. is pain severe enough
12 lead ECG – prehospital role in early notification
Scene time – minimal with need for definitive therapy including PCI or thrombolysis so destination is important