SEPSIS

MIMICS

Case 1

A 34 year old man presents to A&E unconscious and severely hypotensive following several days of diarrhoea. The paramedics report that he is on long-term steroids.

Case 2

A 19 year old man is taken to A&E by friends after complaining of chest pain at a party. His pupils are dilated and there is psychomotor agitation.

HR 120, BP 160/95, RR 20, SpO2 99% air, temperature 38.8 degrees.

Case 3

59 year old female smoker presents with 4/7 progressive shortness of breath, now present at rest. There is no fever and there is no change in her chronic cough. There is widespread wheeze throughout the chest but no focal signs. She has been given a nebuliser in the ambulance.

HR 110, BP 130/60, RR 26, SpO2 92% air, temperature 36.8 degrees.

Case 4

43 year old man brought in by his wife behaving strangely. He is tremulous, sweating, disoriented in time and appears agitated. He has vomited several times in triage. His wife alerts you to the fact that he drinks 12 cans of cider per day.

HR 120, BP 146/72, RR 22, SpO2 96% on air, temperature 37.7 degrees.

Case 5

70 year old woman who underwent an elective total hip replacement 2/52 ago. She presents with shortness of breath, dry cough and right sided pleuritic chest pain. The limb operated on is swollen and diffusely tender. Her JVP is elevated.

HR 130, BP 106/67, RR 26, SpO2 95% on air, temperature 38 degrees.

Case 6

34 year old woman with a history of biliary colic presents with severe epigastric pain and tenderness radiating to the back.

HR 116, BP 112/63, RR 22, SpO2 98% on air, temperature 37.5 degrees.

Answers

Case 1 answer: Addisonian crisis. This patient may indeed be septic but lack of endogenous steroids with which to mount a stress response may cause this presentation in response to even mild illness. Give 100mg IV hydrocortisone or, if able to swallow, double the dose of his usual steroids. Treat aggressively with IV fluids.

Case 2: sympathomimetic poisoning. He meets the SIRS criteria but the agitation, hypertension, dilated pupils and onset of symptoms at a party all indicate cocaine/ecstasy use. It is reasonable to screen for sepsis. Perform an ECG, check his CK and treat with benzodiazepines.

Case 3: exacerbation COPD. Her tachycardia is likely due to nebuliser use and sympathetic response to illness. There is currently no hard evidence of infection, though you should certainly perform a chest x ray to exclude pneumonia.

Loss of fluid through respiration and hypovolaemia may be contributing so it would be reasonable to prescribe some fluid but hold off on antibiotics unless you have reasonable grounds to suspect infection.

Case 4: alcohol withdrawal. Try to establish the last time he had alcohol, perform a GMAWS score and treat him with benzodiazepines and pabrinex. It would be reasonable to perform a sepsis screen, particularly if his symptoms do not improve with treatment of alcohol withdrawal.

Case 5: pulmonary thromboembolism. Both a hospital acquired infection and PTE are likely diagnoses. Treatment for hospital acquired pneumonia pending further investigation is a good idea, but her Modified Geneva score is 15, placing her in a high risk group. Try to obtain a CTPA and, if there will be delay, treat with dalteparin.

Case 6: acute pancreatitis. She most likely has gallstone pancreatitis, and when you check her amylase it is 992. Commence IVF to counteract the systemic inflammatory response/third space losses, ensure she is not pregnant, obtain an erect CXR to rule out perforation and refer to the general surgical team.