

A 54 year old man comes in to the department feeling unwell. He has just come back from “cowboy holidays” in Oklahoma, where he spent 2 weeks cattle rustling and sleeping in tents. He developed flu-like symptoms on the last day of the holidays but did not think much of it. Now, 3 days later, he is complaining of a headache and temperature but his main concern was a strange rash he noticed this morning (right). What is the main question you would ask him? 1 point
 What is the diagnosis? 1 point
 What is the causative organism? 1 point



Had he been bitten by a tick?
 Rocky Mountain spotted fever
 Rickettsia rickettsii

On examination he has a BP of 95/60, pulse 110, temp of 38.5°C. When you get back to him he appears lethargic and asks you to get his mum, it turns out she has been dead for 5 years. Describe your treatment. 3 points

Give Oxygen,
 IV access & Bolus of fluids- 1 l N Sal stat
 IV antibiotics- Doxycyclin 200mg

What is the likely cause of his confusion? 1 point
 List 3 investigations you would perform and how what clinically important abnormalities are they likely to show? 3 points

FBC- anaemia and thrombocytopenia
 U&E- hyponatraemia & renal failure
 CXr- may show pulmonary oedema
 Blood gases- may show lactic acidosis
 BM- exclude hypoglycaemia

LFTs are likely to be abnormal but do not alter Rx, BC is very insensitive and few labs perform it due to bio-hazard. Serology gets done later.