

A 32 year old builder attends the ED with a wound to his left thigh which he sustained on some barbed wire yesterday. He is diabetic, on insulin and has no allergies. He is fully covered for tetanus vaccinations and noticed this morning that his wound, a 2cm superficial wound had become painful and red. The triage nurse marks the 1cm x 2cm area of redness and directs him back to the waiting room. You call him into a cubicle 2 hours later to find him looking unwell. He is pyrexial and looks toxic. The erythema has spread and is now blistered although he says he can't feel it as much now. He has a pulse of 110/min and BP of 94/64.

You examine the leg and find it as you see it below.



What is the likely diagnosis? (1)

Necrotizing Fasciitis

Give 4 features in history and examination would help with the diagnosis? (2)

Rapidly spreading erythema

Dusky purplish discolouration at wound

Anaesthesia to affected area

Putrid discharge / bullae / tissue necrosis

Gas forming infection

Clinical signs of shock/fever/toxic

What are the usual causative organisms? (2)

Group A haemolytic strep / Staph aureus / Bacteroides / Clostridium perfringens /

Peptostreptococcus / Coliforms / Proteus / Klebsiella

1 for first 4, ½ mark each for others

Outline your management of this patient.(3)

High flow Oxygen 15l via rebreather mask

Iv access and 1litre normal saline Stat

FBC/U&E/Blood Cultures/tissue cultures/ABG/urinalysis

Xray affected area for gas gangrene

Iv antibiotics: Benzylpenicillin 1.2g

Clindamycin 600-900mg

Metronidazole 500mg

*3rd generation cephalosporin ceftriaxone 1-2g
Gentamicin if penicillin allergic*

Consider hyperbaric

Refer surgeons immediately

½ mark each

Outline 2 complications. (1)

Renal failure

Circulatory collapse

Repeated and radical amputation leading to disfigurement

What is the overall mortality? (1)

70-80%