Plastic Surgery ST3 Interview Question Bank

**Necrotising Fasciitis**

*A 26 year old man presents with nausea and vomiting. He had a minor laceration to his leg yesterday which has become swollen and painful. The nurse who triaged him in A&E believes the redness has spread since she saw him an hour before.*



**1) How would you approach this patient?**

I would be concerned this patient had necrotising fasciitis which is a surgical emergency. I would therefore assess and resuscitate the patient urgently using an ABCDE approach.

**2) What history would you take?**

* PC:
  + History of trauma
  + When did it start?
  + How quickly has it spread
  + Do they feel systemically unwell?
* PMH:
  + DM
  + Immunosuppression
  + HIV
  + Malignancy
* DH:
  + Anti-coagulants
  + Immunosuppressives
* Allergies
* Last meal

**3) What investigations would you do?**

* Bloods:
  + FBC, U&Es, LFTs, CRP, Coagulation profile, Crossmatch, blood glucose
  + ABG
* Cultures
* Imaging – only if stable, imaging should not delay theatre

**4) How would you manage this patient?**

* While waiting for theatre
  + Aggressive fluid/blood resuscitation
  + High flow oxygen
  + ITU review – ensure a bed is ready
  + Pain relief
  + Broad spectrum IV antibiotics and tetanus prophylaxis
* Surgical:
  + Theatre without delay – an acute emergency
  + Aggressive debridement with return to theatre for 2nd look/further debridement if necessary
  + Reconstruction later down the line when the patient has fully recovered and wound swabs are clear.

**5) How is necrotising fasciitis classified?**

By the organism involved.

Type 1 – polymicrobial (most common)

Type 2 – monomicrobial (Group A beta haemolytic strep is most common)

Type 3 – Marine vibrio vulnificus

Type 4 – MRSA

**6) Are you aware of any scoring systems for necrotising fasciitis?**

Laboratoy risk indicator for necrotising fasciitis (LRINEC Scoring system)

A score >6 has a positive predictive value of 92% of having necrotizing fasciitis

* + CRP (mg/L) ≥150: 4 points
  + WBC count (×103/mm3) <15: 0 points; 15–25: 1 point; >25: 2 points
  + Hemoglobin (g/dL) >13.5: 0 points; 11–13.5: 1 point; <11: 2 points
  + Sodium (mmol/L) <135: 2 points
  + Creatinine (umol/L) >141: 2 points
  + Glucose (mmol/L)>10: 1 point