**SAQ QUESTION: NEEDLE STICK**

While you are supervising a junior doctor inserting an arterial line, they sustain a needle stick injury to her finger.

1. **Outline your approach (6 marks)**
2. **What advise will you provide her regarding the risk of transmission of infection (4 marks)**

The Junior Doctor’s immunisation record is provided by medical administration. It reveals that she has completed her hepatitis B immunisations, but it is not known what her antibody titre is. The source has unknown Hep B status.

1. **Outline your approach (2 marks)**
2. **What instructions will your provide the exposed to prevent secondary transmission (2 marks)**

**SAQ ANSWER:** NEEDLE STICK

1. **Outline your approach**
2. Stop the procedure, ensure that the patient is safe and take over if required
3. Wash the wound immediately with soap & water & express any blood from the wound
4. Refer to local protocol, have junior doctor triaged and reviewed by yourself or senior clinician, ensure confidentiality
5. Test exposed staff member, and record details of hep B immunisations, post-immunisation titre if known, previous testing for HBV, HCV, HIV, tetanus immunisation status.
6. Full disclosure to the source/source’s family and consent for testing for HIV, hep B & hep C as appropriate
7. If patient is HIV positive, or identified as being a high risk candidate - Post-exposure prophylaxis within 2 hours is recommended. if PEP is indicated for HIV, regime should be discussed with infectious diseases specialist as a non-standard regime may be indicated if the source has resistant viruses.
8. If staff member is non-Hep B immune, immunoglobulin may be indicated +/- immunisation may be indicated
9. Offer psychological support/reassurance/ tips on procedure/sharps management
10. **What advise will you provide her regarding the risk of transmission of infection**

* Hepatitis B
  + antigen e positive – 30% Cameron (40% Dunn)
  + antigen e negative – 5%
* Hepatitis C 3% (Dunn) 1.8% Cameron
* HIV 0.3%
* with specific risk depending on:
  + depth of injury
  + whether there is visible blood on the needle
  + needle placement in a vein or an artery
  + lower risk with a solid needle (cf hollow needle) due to a lower innoculum

1. **Outline your approach**

Test exposed person for anti-HBs – if adequate reassure

If inadequate administer HB immunoglobulin (within 72 hours) 400IU IM, and course of vaccination (start within 24 hours).

1. **What instructions will your provide the exposed to prevent secondary transmission**

For the next 12 weeks, practice safe sex, report febrile illness, avoid pregnancy, do not donate blood.