

COLLECTION OF BLOOD FOR CULTURE

1. Skin disinfection and collection:

- a. Take all aseptic precautions, i.e wash hands, wear sterile gloves and do not touch the site of puncture.
- b. 70% alcohol, followed by Povidone Iodine (1.5 –2 min) or Chlorhexidine gluconate (30sec). **DO NOT USE HANDRUB** solution
- c. Venous blood. If taken from indwelling catheter, to be accompanied by another sample from another site.
- d. Wipe surface of bottle cap with 70%alcohol. It is not essential to change needle before inoculation. Mix well after inoculation of bottle.

2. Timing of collection:

- a. Before starting antibiotics . If on antibiotics, take just before the next dose.
- b. Fever starts only about 1hr after bacteria come into the blood, so as soon as fever starts.
- c. May be drawn from two sites at ½ hr interval,

3. Number:

- a. Two or three sets. Single blood cultures should never be drawn from an adult patient.
- b. Draw at least two 5ml sample from two different sites.
- c. Repeat cultures for checking clearance of bacteria after start of antibiotics should be done only after 2-5 days of therapy. This is actually needed only for Infective endocarditis and *Staph.aureus* bacteraemia.

4. Volume:

- a. Higher the volume, better the yield.
- b. Adults – At least 5 ml in each bottle, children have less volume of blood so smaller quantities like 1ml will suffice.

5. Distribution into Aerobic/Anaerobic:

- a. Always larger volume and primary inoculation should be into Aerobic bottle
- b. If only aerobic is used, collect from two sites. This will increase the total amount of blood collected.

6. For catheter related blood stream Infection (CRBSI):

- a. Collect the blood from catheter and from another site. Catheter need be removed only if there is growth in these samples
- b. If the line is removed due to suspected CRBSI, send the portion within the vein along with a sample of blood from another site.

7. Transport:

- a. Label properly and transport safely in upright position.
- b. Do not delay, especially blood bottles of automated systems. Delay can impede the growth of some organisms.
- c. Do not refrigerate.