Policy Name: Blood Culture Procedure (Adult)

Effective Date: 06/30/11

Review History: 11/01/2007, 05/01/2008, 06/09/2009

Policy Primary:

Status: Published

Final Approval:
DUHS Oncology Clinical Practice Council
DUH Clinical Practice Council

Glossary:

Term: Definitions:
Blood cultures are necessary in patients who have a fever as they can assist with antibiotic selection. However, blood samples contaminated by skin flora may increase hospital length of stay due to the needless use of antibiotics resulting in an increase cost of care. Blood cultures are to be obtained by peripheral phlebotomy in two separate limbs or otherwise as ordered by provider. *Initial blood cultures should be drawn prior to initiating antibiotic therapy.*

Patients with permanent lines, i.e. tunneled will have their first blood culture drawn from a peripheral vein and a central line (as applicable). Tunneled lines include Hickman®, Broviac®, or ports. Subsequent cultures will be drawn from central lines only, unless otherwise ordered. The number of blood cultures required is determined by the physician or designee. *Initial blood cultures should be drawn prior to initiating antibiotic therapy.*

Level: Interdependent - asterisked [*] items require an order from a health care practitioner licensed to prescribe medical therapy.

Personnel:

Competencies/Skills:

Required Resources:

Safety butterfly needle 20 or 23 gauge

30 ml syringe

Tourniquet
Blood culture kit (includes adapter cap)
Saline and heparin flushes (for central lines)
2x2 gauze and Band-Aid
Caps for central line

Policy Statement:
To obtain an accurate blood specimen for microbiology testing in the adult population.

A. Assessment:
1. Verify the order for culture.
2. Explain purpose of blood culture. Assess for latex allergies. If present, use appropriate equipment.
3. Select an appropriate vein.

B. Culture from Peripheral Vein:
1. Wash hands. Don clean gloves.
2. Uncover stopper of each bottle and swab with alcohol.
3. Scrub venipuncture site with chlorhexidine (CHG) and allow to air dry at least 30 seconds. If allergic to CHG, use alcohol and povidone-iodine.
4. Palpate prepped site only if sterile gloves are worn.
5. Obtain 30ml of blood (do not draw a "waste" syringe -- use all blood for the blood culture). Remove syringe from safety butterfly and attach to the adapter. Remove the adapter cap and inject 10 ml of blood into each bottle. DO NOT DIVIDE THE SET OF THREE BOTTLES. RETURN ANY UNFILLED BOTTLES.
6. Invert bottle once or twice.
7. Label each bottle with the patient’s name, history number, date, time, site where blood culture obtained, and your initials.
8. Place the set of three bottles in the plastic bag provided and the requisition in the outside pocket of the bag.
10. Wash hands.

C. Culture from Central Line:

NO BLOOD CULTURES ARE TO BE DRAWN FROM ANY EXISTING INDWELLING TEMPORARY LINES INCLUDING A-LINES, PICC’s, PERIPHERAL IV’S, OR ANY TYPE OF CENTRAL LINE WITHOUT A SPECIFIC ORDER FROM AN ATTENDING PHYSICIAN
1. Wash hands and don gloves.
2. Thoroughly cleanse hub/cap with alcohol for 15 seconds.
3. Collect 30 ml of blood from catheter. If you are collecting blood for other tests, collect culture first.
4. Remove the adapter cap and inject 10 ml of blood into each bottle. DO NOT DIVIDE THE SET OF THREE BOTTLES. RETURN ANY UNFILLED BOTTLES.
5. Flush line according to Intravenous Therapy protocol.
6. Invert bottle once or twice.
7. Label each bottle with the patient’s name, history number, date, time, site where blood culture obtained, and your initials.
8. Place the set of three bottles in the plastic bag provided and the requisition in the outside pocket of the bag.
10. Wash hands.

**Reportable Conditions:**

1. Bleeding or swelling at venipuncture site, after applying pressure for 5 minutes or longer as indicated.
2. Inability to obtain blood cultures from peripheral vein as ordered.

* Approved through ECMS- Executive Committee of the Medical Staff

**REFERENCES**

**Citations:**


- Policies:
  - Authoritative Source:
  - Additional References:
  - Attachment Names:

- Company:
- Entities:
  - DUH