HACKETTSTOWN REGIONAL MEDICAL CENTER LABORATORY POLICY MANUAL BLOOD CULTURE PROCEDURE

Effective Date: July, 2008 Policy No: PHLEB 200.01 Cross Referenced: Origin: Phlebotomy

Reviewed Date: 6/1/2012 Authority: Laboratory Director

Revised Date: 5/10, 01/12 Page: 1 of 3

PRINCIPLE: Blood cultures are done to determine if a patient has a bacterial infection in the bloodstream. The specimen is combined with nutritive media and incubated at 37° C for a series of days to mimic the human body. Growth of bacteria confirms diagnosis of sepsis or contamination of the sterile culture due to poor collection techniques.

Special Cautions/Instructions:

- 1. Blood cultures should be collected prior to administration of antibiotics. If this is not possible, be sure to note in the Affinity comment section the name of the antibiotic that is in use and how long the patient has been on the medication. If this is an outpatient, note this information on the microbiology slip.
- 2. It has been recommended by the Infection Control department that blood cultures can only be ordered times two, five minutes apart, from two different sites. These orders are not to exceed two sets per twenty-four hours. Any blood cultures that are ordered times 3 must be verified with a call to the physician. Let the physician know what our protocol is and verify that he does, in fact, want three. Be sure to note this on the computer generated bacteriology requisitions.

Reagents and Equipment:

- ChloraPrep applicators
- Gauze pads
- Gloves
- One aerobic and anaerobic blood culture bottle for each set of cultures ordered
- One butterfly per culture

Note: Two different draw size bottles are provided (Adult bottles draw 3-10 ml)

(*Pediatric bottles draw 1- 5 ml)

*Pediatric bottles have a specially designed neck for both aerobic and anaerobic recovery, so, if using a Pediatric bottle, it is only necessary to drawn one bottle per culture.

Remember, though, quantity is important for the recovery of an infectious organism.

PROCEDURE:

- 1. Select the venipuncture site as would be done for a routine draw. Make sure you are comfortable with the site. Once the area has been properly cleaned, you will not be able to palpate the vein again.
- 2. Apply tourniquet.
- 3. Clean the area well with ChloraPrep applicator as described below:
 - a. Unwrap the ChloraPrep

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b. PINCH and hold the applicator tabs, making sure not to touch the sponge. Pinch once to break the ampule. You should hear a pop.

- c. PRESS to saturate the sponge with ChloraPrep by gently pressing it against the treated area.
- d. PREP using a back and forth scrubbing motion, completely wet the treatment area. If the patient's skin is very wrinkled, be sure to hold to skin taut. This ensures that all of the folds are cleansed.
- e. WAIT 30 seconds for the site to dry completely. Do not blot or wipe the solution away.
- 4. Clean off the top of the blood culture bottles with an alcohol prep only. Do not use betadine to clean the tops of the bottles.
- 5. Perform the venipuncture with the butterfly needle. Allow the blood to fill up to the second 5 ml mark on the aerobic bottle. (Always pull the aerobic bottle first.) Once the 10 ml mark has been reached, remove the aerobic bottle from the adapter and place anaerobic bottle on the adapter. Allow the bottle to fill to the second 5 ml mark. Place a piece of gauze on the needle area and withdraw the needle. Place the used butterfly in the nearest sharps disposal. Use the small red SHARPS on the phlebotomy tray or the wall mounted SHARPS in the patient's room.

6. Labeling bottles:

- Inpatients: Obtain labels and a computer generated requisition from the nurses' desk. Be sure to fill in the date, time, and initials of person who collected sample. Label the bottles with computer generated labels. Make sure the labels also note the date, time and the initials of the person who drew the sample. Also indicate which blood culture is being performed, #1 or #2. Information on whether or not the patient is on any antibiotic or not MUST be noted on the requisition form. If yes, indicate the name of the drug.
- Outpatients: Enter patient into the computer system. A label will generate. Use this label for the bottles. Be sure that the labels are complete with time and date of collection, as well as the initials of the person who collected the sample. A requisition will be made by using the patient's addressograph plate and a microbiology slip (located in the front office). Fill in the appropriate information on the slip. It MUST be indicated on the slip whether or not the patient is on an antibiotic and if so, what it is.
- 7. Return the samples to the micro department. Be sure to clock the requisition in by using the timeclock in specimen processing. The samples are to be left at room temperature. The actual test is performed at St. Clare's and takes five days to receive a final report. A preliminary report will be released every day until the culture is completed. Any questions regarding a culture can be answered by St. Clare's micro staff by speed dialing 01 or 973-625-6708.

Reference: BacT/ALERT FN 5/2009