CONWAY MEDICAL CENTER

PROCEDURE

When in hard copy form, refer to Policy Manager to validate this as the most current revision.

TITLE:	LAB-SPC-04.06 Tenderfoot Heel Incision-Pro		
ISSUED BY:	Administrative Lab Director/ Asst Administrative Lab Director	REFERENCE #:	LAB-SPC-04.06-PRO
APPROVED BY:	Lab Director	EFFECTIVE DATE:	2004-03-24

SCOPE: All potential collectors of lab samples.

PRINCIPLE:

Infant heel blood sampling can result in serious clinical complications if an inappropriate sampling site is selected. Care must be taken to choose the proper heel sampling site to minimize injury to the baby and ensue that a bruised or infected area is not utilized.

PROCEDURE:

I. Supplies:

A. Tenderfoot Device
B. Disposable Gloves
C. Alcohol Prep Pad 70% Isopropyl
D. Gauze pads 2x2
E. Micro Collection Tubes

II. Steps of the Procedure:

A. Pre-collection:
   1. Pre-warming the infant's heel (about 42º C to 44º C for 3 to 5 minutes) with a heel warmer device greatly increases the blood flow for the collection. Temperatures above 44º C will burn the heel. **Note: Do not use warm wet towels or place the heel under a faucet.**
   2. Safety Precaution: Wash hands and put on gloves.
   3. Positioning:
      a. Supine : The ideal posture for the procedure is with the baby in a supine position with the knee at the open end of a bassinet. This position allows for the foot to hang lower than the torso, improving blood flow.
      b. Toddler position Alternative: Allow the child to sit up when performing the heel incision procedure.
   4. Area Prep:
      a. Clean the incision area of the heel with a 70% alcohol prep pad.
      b. Allow the heel to air dry. Do not touch the incision site or allow the heel to come into contact with any non-sterile item or surface.
      c. Site area: Neonatal or infant heel wound is, "Marked by a line extending posteriorly from a point between the 4th and 5th toes and running parallel to

the lateral aspect of the heel, and a line extending posteriorly from the middle of the great toe running parallel to the medial aspect of the heel.

5. Tenderfoot device prep:
    a. Remove the tenderfoot device from its sterile blister pack, taking care not to rest the blade-slot end on any non-sterile surface.
    b. Remove the safety clip. **Note:** The safety clip may be replaced if the test is momentarily delayed; however, prolonged exposure of any tenderfoot device to uncontrolled environmental conditions prior to use may affect its sterility. *NOTE: Once the safety clip is removed, DO NOT push the trigger or touch the blade slot.*
6. Positioning the baby's foot and device:
    a. Raise the foot above the baby's heart level
    b. Carefully select a safe incision site (avoid any edematous area or site with 2.0mm of a prior wound).
    c. Place the blade-slot surface of the device flush against the heel so that its center point is vertical aligned with the desired incision site.
    Note:It is important not handle sick babies unless it is absolutely necessary
    d. Ensure that both ends of the instrument have made light contact with the skin and depress the trigger.
7. Post insertion instructions:
    a. After triggering, immediately remove the instrument from the infant's heel.
    b. Lower the infant's heel to a position level with or below the baby.
    c. Using a dry gauze pad, gently wipe away the first droplet of blood that appears at the wound site.
    d. fill to the desired specimen volume, taking care not to make direct wound contact with the micro collection tube,
8. Post collection instructions:
    a. Label: Properly label specimens before leaving patient's bedside.
    b. Bandaging: Whether or not to bandage the baby is a controversial issue because of skin sensitivity and potential bandage aspiration. However, the incision should be checked before leaving.
    c. Remove gloves and wash hands at the end of the procedure.
    d. Discard the Tenderfoot device in the sharps biohazard container.

III. Conditions Affecting the Procedure:

A. Re-incision of prior wound site
B. Inflamed heel
C. Heel edema
D. Excessive pressure and skin indentation: comes from placing the instrument on the heel, resulting in deep and hazardous wound depth.

IV. Nursery and Pediatrics Requirements:

A. The Tenderfoot device is to be used on ages 0-6 months.
B. Fingers or toes are not be used without the authorization of the Doctor of the Primary Care Nurse.
C. The Tenderfoot device is designed for heels only and must not be deeper than 2.0 mm.

Note: *Excessive crying may adversely affect the concentration of some constituents (eg. Leukocyte concentration and capillary blood gases). If the specimen being collected is for or includes analytes known to be affected by crying, note the condition in computer.*

Reference: Tenderfoot Package Insert**,** International Technidyne Corp., www.itcmed.com ST1524 05/10
CLSI H04-06-Procedures and Devices for the Collection of Diagnostic Capillary Blood Specimen; Approved Standard-Sixth Edition (ISBN 1-56238-677-8) Pages 5-6.

RECORDS: NA

REFERENCE STANDARDS:
CAP GEN.40000; GEN.40016; GEN.40032; GEN.40050; GEN.40050; GEN.40100

REVISION/REVIEW HISTORY:

Date	Affected Section(s)	Summary of Changes ('Reviewed' or details of change)
05/31/2011 dlt	None	Review/Revisions electronically saved in lab G drive.
11/01/2011 lds	Format	Imported to MCN procedure format.
03/15/2013dlt	All	Reviewed no content changes. Newest format requirements.
03/23/15 dlt	ALL	Reviewed no content changes. Reviewed on-line "Package Insert" updated
01/23/17 dlt	All	Reviewed no content changes
09/19/17 lds	All	No content review Removed reference to Meditech