Umbilical Cord Blood Collection Procedure

OBJECTIVES:
1. To collect the maximum volume of umbilical cord blood without compromising the safety of the mother or baby.
2. To ensure that there is no microbial contamination of the cord blood.

I. Maternal Blood Draw:
1. Please draw three full Vacutainers® of blood from the mother before or after delivery.
2. Please ensure that the tubes are clearly identified with mother’s name and date of collection. Place the tubes back into the bag labeled “maternal blood draw”, before placing them into the CReATe Cord Bank Box.

II. Vaginal Delivery Procedure:
1. After the baby is delivered double clamp and cut the umbilical cord close to the baby’s abdomen.
2. Take regular blood, as required, from the umbilical cord and clamp just above this.
3. Remove the collection bag from the foil cover, then open the plastic covering and remove the collection bag. Gently straighten the collection bag tubing and lower the bag.
4. Cleanse an area of the cord near the clamp with the iodine swabs provided in the kit.
5. Remove the cover from the needle on the collection tubing and puncture the umbilical vein in the area that you have cleansed. Allow gravity flow; collect as much blood into the bag as possible. This should take approximately 3 to 5 minutes. If the flow stops, try some abdominal pressure over the uterine fundus. Then repeat umbilical vein prep and needle insertion on a new site, if possible.
6. Gently mix the cord blood and anticoagulant in the collection bag during and after collection.
7. After collection is completed, remove the needle from the cord & slide needle guard over needle.
8. Tie two knots in the tubing approximately 10cm above the collection bag.
9. Cut off the needle with the guard and dispose of it in a sharps container.
10. Complete all required patient information directly on collection bag. Do not cover the bar code or lot number.
11. Adhere the enclosed maternal identification label onto the collection bag. Please ensure that all details on the label and the collection log are completed.
12. Place the labeled collection bag and Vacutainers® in the Biohazard bag, before placing them in the bag labeled “cord blood collection”, seal it and place it in the CReATe Cord Blood Bank Box. Please ensure it is double bagged.
13. Please ensure that the Physical Examination form has been completed and that the parents have reviewed their medical history questionnaire. These documents are required by Health Canada, and must be returned with the cord blood to ensure prompt processing.

III. Caesarean/Sterile Procedure:
1. After the baby is delivered, double clamp the cord and cut the umbilical cord close to the baby’s abdomen.
2. Proceed with the collection as per the instructions for vaginal delivery noted above (2-11).

IV. Ex Utero Procedure:
1. Place the placenta and cord into a sterile basin.
2. Follow the instructions for vaginal delivery (2-11).

V. After Collection:
1. Please remind the patient to call CReATe Cord Blood Bank to notify us of the delivery and it will be picked up from the nurses’ station on the labor and delivery floor.
2. Maintain at room temperature between 4°C-30°C (39°F-86°F).