DIRECTED CORD CELL COLLECTION IN THEATRE

AIM

To ensure theatre personnel have appropriate guidelines for directed cord cell collection.

KEY POINTS

1. The Surgeon shall be responsible for the directed cord cell collection and nursing / midwifery staff shall act on surgeon’s request.
2. Obstetric procedures take precedence over cord blood collection. Collection shall be deferred or not performed due to medical requirements.
3. The manufacturer’s instructions for cord cell collection must be followed.
4. If a company representative arrives in theatre, they are not to scrub and must take direction from the theatre staff.

PROCEDURE

1. Open the outer wrapper of the collection kit for scrub nurse to take inner bag (do not open inner bag yet). Ensure a 10ml syringe and 19g needle are on the scrub trolley (for routine collection of cord blood).
2. When the baby has been delivered, clamp the cord as close to the baby as possible.
3. Administration of syntocinon ® may need to be delayed, check with the surgeon first and inform the anaesthetist.
4. As soon as baby is separated from the umbilical cord, swab the distal end of the cord at the site where venepuncture will take place (use Betadine then wipe it off).
5. The Surgeon then takes one of the needled syringes from the collection set and places it into the umbilical vein. All bags are to remain enclosed in thin plastic wrapper.
6. Bag should then be passed off and lowered to the floor to help ensure good blood collection.
7. Once blood flow has ceased and the umbilical cord vein has collapsed, clamp the umbilical cord above the venepuncture site before removing the needle.
8. If the vein fails to completely drain due to a clot or restriction in the cord, attempt a subsequent venepuncture higher on the cord.
9. Clamp and remove the needle and secure with the secuvam cover. If needed the other needle can then be used.
10. Ensure both clamps have been secured below the needle guards on each of the needle lines.
11. Once all the blood has been collected, pass to the circulating nurse. If able, routine cord blood collection should now be taken with 10ml syringe and 19g needle.
12. Circulating Nurse- Break the seal on small bag of anticoagulant (situated close to the Y junction below the needles) and roll up so that the anticoagulant flows into the tubing.
13. Seal the line with the tube clamp, hold the clamp firmly closed and “milk” the tube towards the collection bags so that all the anticoagulant flows into collection bag.
14. Seal the clamp at the top of the blood pack.
15. Rock the blood pack in a swirling motion to ensure the anticoagulant is mixed well with the blood.
16. Label the Cord cell collection bag with a neonatal ID sticker. Place a label on plastic wrap that covers cord cell collection bags and NOT on the bags themselves.
17. All samples to be sent to Haematology within 30 minutes of directed cord cell collection.