Radiofrequency ablation for fetal reduction

L&D Nursing guidelines

Purpose – radiofrequency ablation of fetal vessel in complicated monochorionic twin pregnancy

Staff:

- Circulator nurse (scrub not necessary, but nice if available)
- Scrub available in setting of fetus > 23 weeks EGA and there is the potential for cesarean delivery in the setting of fetal bradycardia
- Faculty MFM; physician for sonography; physician as assistant
- Anesthesia

Indications:

- Monochorionic twin pregnancy with TRAP, discordant anomaly, TTTS
- Selective/elective multifetal pregnancy reduction in monochorionic twin pregnancy

Equipment list in OR:

- GE US machine from triage
- Probe cover and US sterile drape
- Amnioinfusion equipment may be required – review with MFM prior to procedure:
    - Sterile IV extension tubing (x 3)
    - Three way stop-cock
    - 20 cc syringe (luer lock tip) x 2
    - 1 L NS – to anesthesia (place in warmer line); pressure bag
    - 20 gauge spinal needle
- 11 blade
- cesarean drape
- 10 cc syringe x 3 if amniotic fluid is needed for analysis
- table cover
- raytec pack x 1
- steri-strips + mastisol
- suture scissors
- RITA Starburst SDE electrosurgical device (L = 12 cm; D = 2 cm)
- RFA generator
    - Bilateral return electode leg pads
    - Folded towels
- Bandage

Procedure:

Pre-op abx: 2 gram cefazolin prior to procedure

Anesthesia: spinal vs local with sedation – OB anesthesia and MFM to confer

Prep/positioning:

- Supine position with left lateral tilt (bovie pad not needed)

- Place foley after spinal – confer with attending and may elect not to place foley if anticipate short case
- Cesarean prep and drape (cesarean instrument tray NOT needed)
- SCD's in place

Procedure briefly: MFM will perform US to confirm fetal position.

If amnioinfusion is necessary: IV tubing assembled with luer lock end at fetus end to attach to spinal needed, then 3 way stop-cock, then second and possibly third IV extension tubing to hand off to anesthesia. Tubing primed with NS via IV warmer. 20 g spinal needed placed and saline infused via syringe to confirm intra-amniotic placement. Transabdominal amnioinfusion done if needed via 20 gauge needle into amniotic cavity until adequate AF pocket present to allow shunt placement – usually ~ 500-600 ml. Needle removed.

Specimen:

- Usually no specimen
- May have amniotic fluid for karyotype, array, save cells, PCR for infection studies (review with MFM)

Post procedure – recovery – discharge:

- Meds: may give Indocin 50 mg po prior to discharge and then 25 mg po q 8 hours x 24-48 hours
- Keflex 500 mg po bid x 7 days
- If plan is for cesarean/delivery for abnormal fetal monitoring, place on fetal monitor post procedure. Review with MFM regarding fetal monitoring needed for individual case.
- Discharge in consultation with MFM when tolerating PO, void without comps, appropriate pain symptoms, spinal resolved.
- Will need follow up in US unit in 5-7 days.