FETICIDE AND MULTI-FETAL REDUCTION

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM
   • Singleton feticide under aseptic conditions to induce fetal asystole prior to pregnancy termination
   • Selective feticide under aseptic conditions of fetus in a multiple pregnancy affected by a fetal anomaly
   • Multi-fetal reduction under aseptic conditions to reduce a higher order multiple pregnancy to a singleton or a twin pregnancy
   • Appropriate and sympathetic supportive medical and psychosocial counselling of the woman

2. PATIENT
   • Woman requesting induction of fetal demise prior to medical or surgical termination of pregnancy
   • Woman requesting selective feticide for fetal anomaly or multi-fetal reduction of a higher order multiple

3. STAFF
   • Maternal Fetal Medicine (MFM) Accredited Specialist
   • MFM trainee under supervision of Specialist
   • MFM Midwives
   • Genetic counsellor
   • Social Workers
   • Psychiatrists
   • Sonographers

4. EQUIPMENT
   • Ultrasound machine
   • 20G echotip needle
   • 22G spinal needle
   • 1ml syringes (fetal rocuronium and morphine where required)
   • Anaesthetic Procedure Pack containing:
     o Sterile drape
     o 5 ml syringe (for local anaesthetic)
     o 10 ml syringe (for potassium chloride – KCL)
     o 23G needle
     o 18G needle
   • Chlorhexidine 0.5% in alcohol 70%, 25 mls antiseptic skin cleaner
   • 2 sterile gowns
   • 2 pairs sterile gloves
   • Sterile cotton wool balls
   • Sterile ultrasound probe cover
   • 2 sterile lubricating gel sachets
   • Bandaids
5. MEDICATION
   - Lignocaine 2%, 2 x 5mL ampoules
   - Sterile KCL concentrate 10 mmol/L (0.75g) in 10 mL
   - Rocuronium bromide (50 mg in 5mL for fetal paralysis as required)
   - Morphine 10 mg/1 mL (for fetal analgesia as required)
   - Lorazepam 1mg- 2mg orally and Panadeine Forte x 2 orally for maternal anxiety and pain relief (as required)

6. CLINICAL PRACTICE
   - Counsel woman with MFM specialist and MFM midwife with regard to clinical options
   - Ensure woman has met with Social Worker and/or other appropriate support service
   - Fulfil hospital termination review process in cases of a gestation beyond the 20th week
   - Advise woman (where applicable) of the risks of the procedure including spontaneous miscarriage of entire pregnancy
   - Obtain written consent from woman for procedure of feticide or multi-fetal reduction
   - Offer woman oral antianxiety medication Lorazepam and oral pain relief Panadeine forte. Ideally should be given 30 minutes prior to procedure.
   - Perform the procedure in one of the two ultrasound procedure rooms with:
     - aseptic technique
     - a medical assistant (if trainee is performing the procedure, this must be an accredited specialist)
     - a midwife assistant
   - Confirm the site of the relevant fetus(es) on ultrasound and chorionicity
     - when performing selective feticide state the position of the affected fetus aloud and document with 2 clinicians confirming correct fetus
     - when performing multi-fetal reduction select fetus furthest away from cervix where possible or fetus with greater number of markers for aneuploidy: e.g. large nuchal translucency, shortest Crown Rump Length (CRL)
   - Administer local anaesthetic 2% lignocaine 5 mls to the woman at relevant site by subcutaneous injection
   - Consider the use of Rocuronium for fetal paralysis:
     - Less than 30 weeks gestation 2 mg = 0.2mLs by intramuscular (IM) injection into fetus
     - Greater than 30 weeks gestation 3 mg = 0.3mLs by IM injection into fetus
   - Consider the use of intra-muscular morphine to the fetus for analgesia in gestations of 24 weeks and above at a dose of 100 mcg/kg
   - Enter amniotic cavity under ultrasound visualisation with 20G needle. Aim for intra-cardiac injection
   - Aspirate fetal blood to confirm correct needle placement into the fetal heart then inject KCL (10 mMol/10mL)
     - First trimester 1 – 2 mL KCL
     - Second trimester 5 mL KCL
     - Third trimester 10 mL KCL
   - Watch for asystole, inject further KCL up to a volume of 10 mL if required and watch for 2 minutes to confirm asystole
   - Rescan 30 – 60 mins later to ensure fetal asystole
   - Arrange appropriate follow up with midwife, obstetrician, social work or mental health worker
   - Arrange admission for induction of labour where appropriate
FETICIDE AND MULTI-FETAL REDUCTION  cont’d

7. DOCUMENTATION
   • Medication Chart
   • Integrated Clinical Notes
   • Antenatal Yellow Card
   • ViewPoint report
   • ObstetriX

8. EDUCATIONAL NOTES
   • The use of intra-cardiac KCL is the most effective method of feticide (1)
   • In one series of 239 terminations of pregnancy beyond 20 weeks of gestation the mean dose of KCL required was 4.7 mL with a range of 2 – 10 mL
   • There is one reported case of maternal sepsis in the literature secondary to feticide
   • There is one reported case of inadvertent maternal intravascular injection of KCL necessitating successful resuscitation of the mother
   • If additional sedation is required, intravenous midazolam may be a suitable alternative to oral medication. An anaesthetist must be present for administration of IV sedation. This may require the procedure to be performed in the operating theatre.

9. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP
   • Terms of Reference for the Termination Review Committee, RHW
   • Termination of Pregnancy – Framework
   • Misoprostol mifepristone for medical termination of pregnancy and or fetal death

10. RISK RATING
    • Low

11. REFERENCES

REVISION & APPROVAL HISTORY
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