Approved by Quality & Patient Safety Committee
20 November 2014

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:
    - Sterile drape
    - 5 ml syringe (for local anaesthetic)
    - 10 ml syringe (for potassium chloride – KCL)
    - 23G needle
    - 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

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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

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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

1. Pasquini L, Pontello V, Kumar S. Intracardiac injection of potassium chloride as method for feticide: experience from a single UK tertiary centre. 2007. BJOG 115:528-31
2. Diedrich J, Drey E; Induction of fetal demise before abortion. Society of Family Planning Guideline. Contraception 2010;81(6):462.

REVISION & APPROVAL HISTORY

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