Anaesthetic Management of Intra-Uterine Foetal Demise

Background:

The incidence of Intra-Uterine Foetal Demise (IUFD) is 5-7/1000 deliveries. Approximately half of IUFDs occur prior to 28 weeks of gestation and about 20% are at or near term. This guideline is directed towards the management of the latter group, although the principles of management are same for both groups. This is a very distressing event for the woman and her family and provision of good pain relief is very important.

Common causes of late IUFD:

Antepartum – Congenital malformation, congenital infection, antepartum haemorrhage, pre-eclampsia, maternal diabetes mellitus.

Intrapartum – Placental abruption, severe maternal or foetal infection, cord prolapse, uterine rupture, idiopathic hypoxia-acidosis.

Management:

General Care – These women should be cared for in a quiet room, isolated from the normal labour ward activity. They should have one to one midwifery care. Family members should be allowed free access to support the woman.

Obstetric Management - In the past, women with IUFDs were managed expectantly and approximately 90% began spontaneous labour within 3 weeks of foetal death. Current practice is to induce labour earlier both because many women do not wish the dead foetus to remain in utero for weeks and because of the possibility of developing coagulopathies. Occasionally they may have to be delivered by caesarean section.

Anaesthetic Management –

- Woman should be offered to see duty anaesthetist when she comes in for induction of labour or in spontaneous labour.
- He/She will then assess the patient for possibility of coagulopathy and or sepsis, especially before administering regional anaesthesia. Duty anaesthetist will discuss various options for analgesia with the woman.
- Blood should be sent for full blood count, coagulation screen and biochemistry including CRP. Although the incidence of coagulopathy is very low if the foetal demise has happened within 2 weeks of presentation, it can occur in some patients (3.2%) on presentation without an apparent cause. The risk is more in presence of abruption, uterine rupture or pre-eclampsia. Delivery complications associated with coagulopathy occur in 11% of women with IUFD and are associated with the abovementioned conditions in most cases.
- Analgesia - All usual modalities should be available, including regional analgesia. It is particularly important for women with IUFD, as they may find labour and delivery physically insufferably harder. Various options available are:
  
a) Entonox
b) Parental Opioids, either by IM route or as PCA. Diamorphine and morphine preferred over pethidine as they have greater analgesic qualities and longer duration of action. Morphine or fentanyl can be used for PCA according to protocol. Intravenous paracetamol 1gm/6 hourly to be used to supplement opioids.
c) Regional analgesia – If no evidence of coagulopathy or sepsis. Epidural catheter inserted with aseptic technique. Connected to PCEA pump. Routine maternal observations must be recorded according to PCEA protocol.
d) In the rare instance where Caesarean Section (CS) is indicated (e.g. abruption with massive bleed, risk to maternal life necessitating CS), General Anaesthesia would be most likely required. Pain relief as for post CS according to protocol should be followed.

References:

3. Royal College Of Obstetrics and Gynaecology –Green top guideline no.55 (pp6, 16).
4. Obstetric Anaesthetic Association (OAA) survey 2010- Sreelakshmi, Swales, Jenkins, Rathinam, Sashidharan.

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