North West Management of Second Trimester Pregnancy Loss

Guideline V3

Ensuring optimal management for families who experience a second trimester pregnancy loss

To be used from 13+0 weeks to 23+6 weeks gestation

in association with the NW Management of Second Trimester Pregnancy Loss Integrated Care Pathway

From 24+0 weeks please see NW Stillbirth Guideline and ICP

Version 3 | August 2022

Guidelines produced by:
NHS Greater Manchester and Eastern Cheshire Strategic Clinical Networks
NHS North West Coast Strategic Clinical Networks

In honour of all the parents and families who have experienced a pregnancy loss

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Version control

Version number	Status	Date
1.0	Published 2017 for use across GMEC and NWC SCNs	01/12/17
2.0	Publication date	02/03/18
2.1	Revisions to launch v3.0 Spring 2022	21/07/21 20/10/21
2.2	Final request for comments	22/1/22
2.3i	Working version	28/1/22
2.4	Comments week 1 & 2 actioned	23/2/22
2.6	Final amends EC & SW	2/8/22
V3	GMEC SCN – ratified by Maternity Steering Group L&SC SCN C&M SCN	12/8/22
V3i	Section 5 Termination of Pregnancy for Fetal Abnormality renamed to Termination of Pregnancy for Fetal or Maternal Reasons. Comms circulated	26/5/23

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Acknowledgements

On behalf of the Greater Manchester and Eastern Cheshire (GMEC) and North West Coast (NWC) Strategic Clinical Networks, I would like to take this opportunity to thank the authors for their enthusiasm, motivation and dedication in the development of the updated North West Second Trimester Pregnancy Loss Guideline and Integrated Care Pathway.

I would also like to acknowledge and thank the contributions from members of the GMEC SCN Perinatal Loss Special Interest Group and North West Neonatal Operational Delivery Network.

Once finally endorsed these guidelines are available to be adopted across the North West (and anywhere else that finds this useful) in order that parents and their families receive universal and high quality care if they experience pregnancy loss.

Please note that appendices are geographically orientated and may need editing or localisation.

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1. Introduction

The purpose of this guideline is to deliver gold standard care in the management of women who experience pregnancy loss between 13+0 and 23+6 weeks. For stillbirth (from 24+0 weeks) please refer to the North West Management of Stillbirth Guideline and ICP.

Spontaneous miscarriage is the most common complication of pregnancy, occurring in about one fifth of clinical pregnancies[1]. The miscarriage rate is reduced to approximately 1% if a live fetus has been identified by ultrasonography at 10 weeks gestation in a normal population.[2] Miscarriages occurring in the second trimester of pregnancy are less common and often unexpected. The incidence of miscarriage in the second trimester varies depending on the gestational age in weeks that is used in definitions and also whether the pregnancy has been dated and evaluated using ultrasound. In low risk women the risk is approximately 0.5%[3].

The loss of a pregnancy at any gestation is traumatic for the parents, who deserve to be cared for with empathy and compassion. Commenting about mid-trimester loss a Sands report noted:

> "Poor or insensitive care at this traumatic time adds significantly to parents' distress. Good care should be universal and should not depend on where a mother happens to live or to be cared for." [4,5]

This guideline has been written by a multidisciplinary team of professionals working in maternity units across the North West. In the absence of a national guideline, Clinical Practice Guideline 29, The Management of Second Trimester Miscarriage from the Institute of Obstetricians and Gynaecologists and Royal College of Physicians of Ireland was reviewed, along with the relevant sections of the RCOG Green Top Guideline No 55, Late Intrauterine Fetal Death and Stillbirth.[6,7]

This guideline is written to support an integrated care pathway to enable optimal care to be given from the point of diagnosis of second trimester pregnancy loss. Whilst this guideline does not cover the management of threatened miscarriage or preterm pre-labour rupture of membranes (PPROM), it would be appropriate for use should either of these conditions result in pregnancy loss before 24 weeks gestation. It is also relevant to situations where maternal well-being is compromised and delivery indicated in the second trimester before 24 weeks gestation. In these cases, particularly between 22 weeks and 23+6 weeks where it is uncertain whether the baby will be born alive, a flowchart is included on page 9 based on the BAPM Framework on Extreme Preterm Birth (2019) [8].

2. Presentation, Diagnosis and Immediate Care

In women who present with abdominal pain and vaginal bleeding or spontaneously miscarry, the diagnosis may be clinical. However, many do not present in this way in the second trimester. Women may present with a history of ruptured membranes or very subtle signs such as increased vaginal discharge or feeling pressure in the vagina. In some circumstances the woman may be asymptomatic and the diagnosis made during a routine ultrasound examination.

A thorough clinical history and physical examination are important in the assessment of women presenting with symptoms or signs suggestive of miscarriage. A past obstetric history should be obtained as well as any previous history of miscarriage or cervical surgery (including cervical suture).

Clinical examination should include the woman's vital signs and careful abdominal examination assessing for any uterine tenderness. Sterile speculum examination should be performed by a trained individual in an appropriate environment, ensuring the woman's privacy and dignity. Assess the cervix, look for any vaginal bleeding or pooling of liquor. A high vaginal swab should be sent for microbiological culture and sensitivity. If the membranes are ruptured, digital vaginal examination should be avoided to minimise the risk of ascending infection. If the cervix needs to be assessed with a view to induction, vaginal examination in the presence of ruptured membranes should be deferred until induction so that the examination to birth interval is minimised.

When fetal demise is suspected and the woman is not actively miscarrying this **must** be confirmed by two-dimensional ultrasound at the earliest opportunity. If the diagnosis is suspected in the community setting, then the woman should be referred to hospital for confirmation.

The optimal method to confirm fetal demise is an ultrasound scan performed by trained sonographers. However, out of hours a practitioner with appropriate training may use a portable ultrasound machine. The fetal chest should be imaged in the transverse plane. Ideally, a four-chamber view of the heart should be identified, though this may be difficult at earlier gestations. Colour flow Doppler is useful to verify the absence of heart activity.

It is advisable to obtain a second opinion from a suitably trained person whenever possible although it is recognised that this may not always be possible in emergency situations.

Following the diagnosis and confirmation of a miscarriage the parents must be given time to absorb and accept this news. A clear, sensitive and honest explanation should be given as to what has happened by experienced staff. The language used should be clear.

A suggested statement: "I'm terribly sorry, I can see your baby's heart clearly and it is not beating, which means your baby has died."

If the mother has attended on her own, an immediate offer to contact her partner or a family member or friend should be made and support given. Many parents are surprised and

shocked that they will still have to give birth vaginally and it is vital that they are fully informed. Questions should be welcomed and encouraged.

A patient information leaflet should be offered such as Miscarriage Association: Pregnancy Loss patient information (March 2017) which is suitable up to 16 weeks, the RCOG leaflet When your baby dies before birth may be more suitable after 16 weeks (March 2022).

Parents should be included in discussions about management options and their wishes should be taken into account. Some mothers will want to go home and see family members before delivery whilst others will want the induction process to commence as soon as possible. If the mother had been feeling fetal movements before diagnosis, then the possibility of passive movements should be discussed with her and contact numbers should be given.

Although care should be taken not to overload the parents with too much detail initially, it is important to give adequate information. Where possible, it is good practice to have an early discussion about what to expect in terms of induction, analgesia, birth, appearance of baby, memory boxes and other mementos. Parents also want to know about investigations which may be offered and funeral arrangements.

3. Psychological Support Following Pregnancy Loss[9]

Pregnancy loss can be associated with short term and chronic anxiety and depression not only in the mothers but also partners, fathers, siblings and other family members. Feelings of grief and loss (bereavement reactions) are very common and expected. It is important to ensure that the family are well supported throughout the hospital stay and beyond, with as much continuity of care and carer as possible. Every woman who suffers a pregnancy loss is at risk of depression, but those with psychiatric illness or from a vulnerable social group are at particular risk. As soon as practically possible involve your Trust's Bereavement Midwife, Specialist Nurse or Midwife or Counsellor to provide ongoing support.

Place of care

Whilst in hospital the parents should be cared for with respect and dignity, if possible in a single room to ensure privacy during this difficult time. Ideally, these parents should be cared for in a different environment from mothers with healthy babies. A Consultant Obstetrician or Gynaecologist should be made aware of the admission, depending on gestation and place of care. Efforts should be made to provide continuity of care and carer. Care in labour should be given by an experienced midwife or nurse. Ideally one to one care should be facilitated at least for the first 24 hours to support the mother and the family and undertake necessary paperwork, but it is recognised that whilst ideal this may not always be possible during times of high activity in the maternity unit. The partner/family should be able to remain with the mother as long as she wishes.

Spiritual care

Parents may want the opportunity to see their own religious leader or a member of the local chaplaincy service. This should be facilitated by staff and offered to all families even if they do not have a specific faith. Some Trusts hold an annual remembrance service, which parents should be informed about and may wish to attend.

See support organisations.

4. Multiple Pregnancies

Multiples make up approximately 3% of pregnancies in the UK with numbers rising significantly over the past 20 years due to the increasing use of assisted conception techniques such as IVF. Clinicians should be aware that fetal loss occurs more frequently in multiple pregnancies than singleton pregnancies. At gestations less than 24 weeks the fetal loss rate for monochorionic twins is estimated to be 14.2% compared with 2.6% for dichorionic twins. [10,11]

Clinicians should appreciate the complexity and mixed emotions of couples who experience miscarriage, termination or selective reduction of one or more fetuses with a surviving twin or higher order multiple. The timing and mode of delivery will depend on chorionicity, gestation, the presentation of the fetuses and the wellbeing of the surviving baby/babies. Specialist advice should be sought in complex cases (e.g. local multiple pregnancy lead).

Parents will require support throughout the pregnancy and birth and bereavement care. Parents want to talk about the baby that has died and to acknowledge that they were twins. Some parents may wish to take photographs of the babies together so this should be discussed and offered. The Butterfly Project supports families who have lost a baby from a multiple pregnancy. Their guideline for professionals 'Bereavement from a multiple pregnancy' was published in May 2016. The Butterfly Project | Co-twin loss; Healthcare education; Neonatal Research (neonatalbutterflyproject.org)

Parents may also wish to access the Twins Trust resources https://twinstrust.org/bereavement.html

5. Second Trimester Termination of Pregnancy for Fetal or Maternal Reasons

Termination of pregnancy is legal at any gestation following a diagnosis of a severe abnormality. Parents should be cared for with the same compassion as with an unexpected fetal loss. Good communication with the parents and between all health care professionals involved is of primary importance.

The RCOG recommends that "for all terminations at a gestational age of more than 21 weeks + 6 days, the method chosen should ensure that the fetus is born dead". Termination of Pregnancy (TOP) at this late gestation requires administration of intra-cardiac potassium chloride (KCl) to the fetus, prior to induction.[12] This is a rare event and will be arranged in liaison with a tertiary fetal medicine unit (where the feticide will be performed). Clause E of the Abortion Act form (HSA1) will need to be completed by two doctors prior to performing this procedure. Following all terminations form HSA4 needs to be completed online.

Feticide is performed under ultrasound control with 15% KCl solution injected into either the umbilical cord vein or heart. A further ultrasound scan is performed after 30 minutes to ensure fetal demise. In certain specific situations where the fetus would be expected to die in the immediate neonatal period from the abnormality (anencephaly, limb body wall complex, renal agenesis and lethal skeletal dysplasias) feticide may not be necessary.

The timing of medication for induction will need to be agreed with the fetal medicine unit. Mifepristone 200mg can be given prior to or after the procedure. Following discussion with the woman a time appropriate to her circumstances and clinical service needs should be agreed for her to return for induction to give birth. This is commonly 48hrs after mifepristone but may be earlier.

Ensure that the woman has a 24 hour contact number for the relevant ward or clinical area, should she need advice prior to her planned admission.

The recommended misoprostol dose for second trimester termination is higher than that used for induction for fetal demise. FIGO recommends 400 micrograms vaginally every 3 hours, one course being a total of 5 doses.[13] The safety of misoprostol in women with a previous Caesarean section is unknown. Therefore, it is recommended that we use half the dose (200 micrograms) for these women. At earlier gestations, surgical termination may be an option; please refer to local trust guidance.

Parents should be provided with the ARC (Antenatal Results and Choices) information booklet. A list of contact numbers and website addresses for other local and national support groups can be found on page 27.

Parents should be informed that at gestations below 21+6 weeks, the baby may be born with signs of life (easily visible heartbeat seen through the chest wall, visible pulsation of the cord after it has been clamped, breathing, crying or sustained gasps, definite movement of the

arms and legs.) The baby should be wrapped and treated with respect and dignity. The parents should be given the opportunity to hold their baby if they wish. See Care During Labour and Birth onwards for care during giving birth and postnatal care.

A baby born with signs of life following a termination of pregnancy who subsequently dies must be referred to the coroner and registered as a live birth and neonatal death irrespective of gestation.

[Updated 26/5/23]

6. Births At 22+0 to 23+6 Weeks

When it appears that a mother will give birth at a very early gestation, the obstetric history and antenatal course must be considered carefully with particular attention to ultrasound scan(s) to accurately calculate gestation. Antenatal management decisions should involve both parents and the obstetric and neonatal teams who will be caring for the family before and after the birth. (See figure 1.)

The table below should be used to individually risk assess each baby and guide appropriate management. This table is taken from the BAPM Perinatal Management of Extreme Preterm Birth before 27 weeks of gestation (published October 2019)[14]

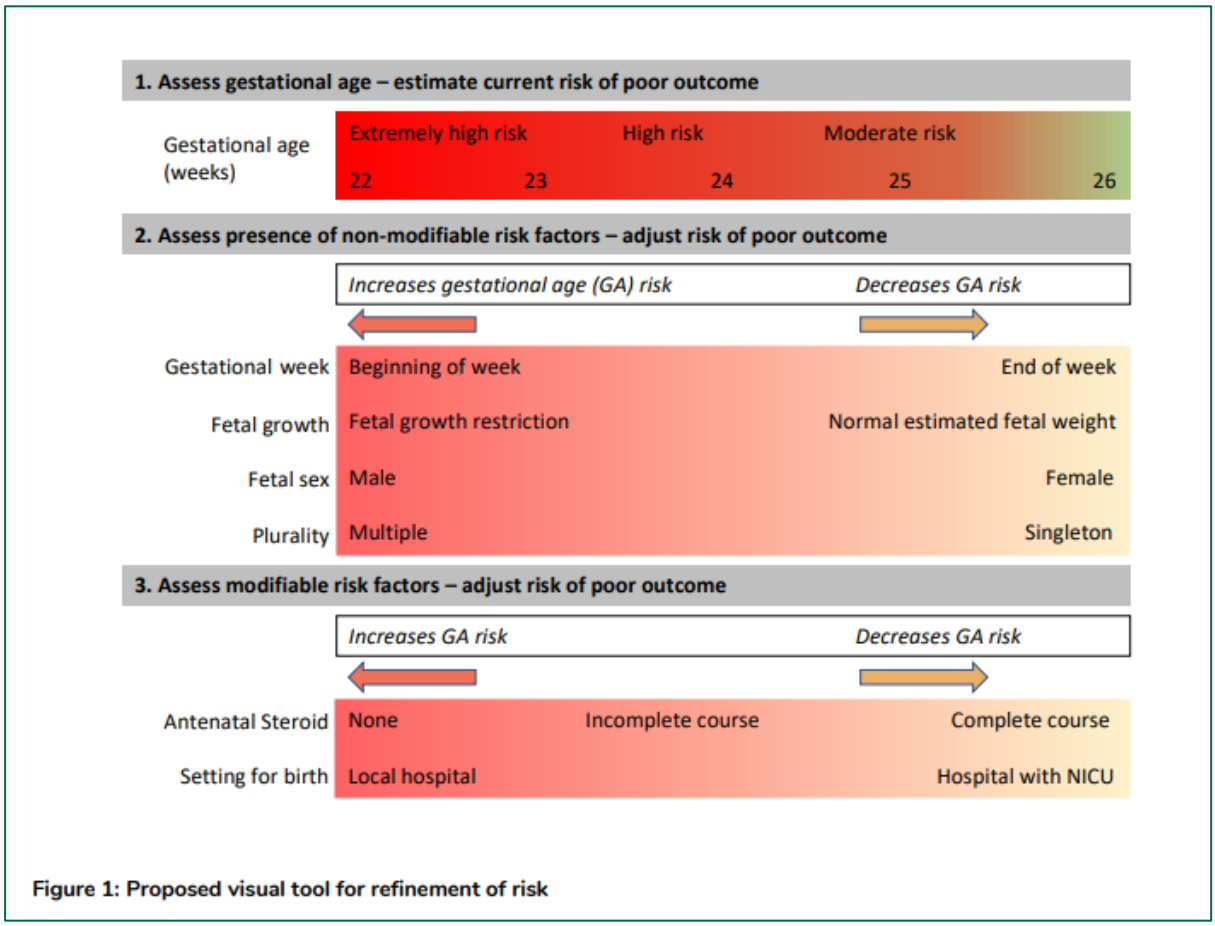


Figure 1: Proposed visual tool for refinement of risk (BAPM 2019)

BOX 1

Extremely high risk: The Working Group considered that babies with a > 90% chance of either dying or surviving with severe impairment if active care is instigated would fit into this category. For example, this would include:

- babies at 22^{+0} - 22^{+6} weeks of gestation with unfavourable risk factors
- some babies at 23^{+0} - 23^{+6} weeks of gestation with unfavourable risk factors, including severe fetal growth restriction
- (rarely) babies ≥ 24^{+0} weeks of gestation with significant unfavourable risk factors, including severe fetal growth restriction

High risk: The Working Group considered that babies with a 50-90% chance of either dying or surviving with severe impairment if active care is instituted would fit into this category. For example, this would include:

- babies at 22^{+0} - 23^{+6} weeks of gestation with favourable risk factors
- some babies ≥ 24^{+0} weeks of gestation with unfavourable risk factors and/or co-morbidities

Moderate risk: The Working Group considered that babies with a < 50% chance of either dying or surviving with severe impairment if active care is instituted would fit into this category. For example, this would include:

- most babies ≥ 24^{+0} weeks of gestation
- some babies at 23^{+0} – 23^{+6} weeks of gestation with favourable risk factors.

Box 1 represents the consensus of the [BAPM] working group in regard to risk categories for the framework (BAPM 2019)

The agreed risk for the baby has ethical and practical implications for the options that should be available.

Extremely high risk:

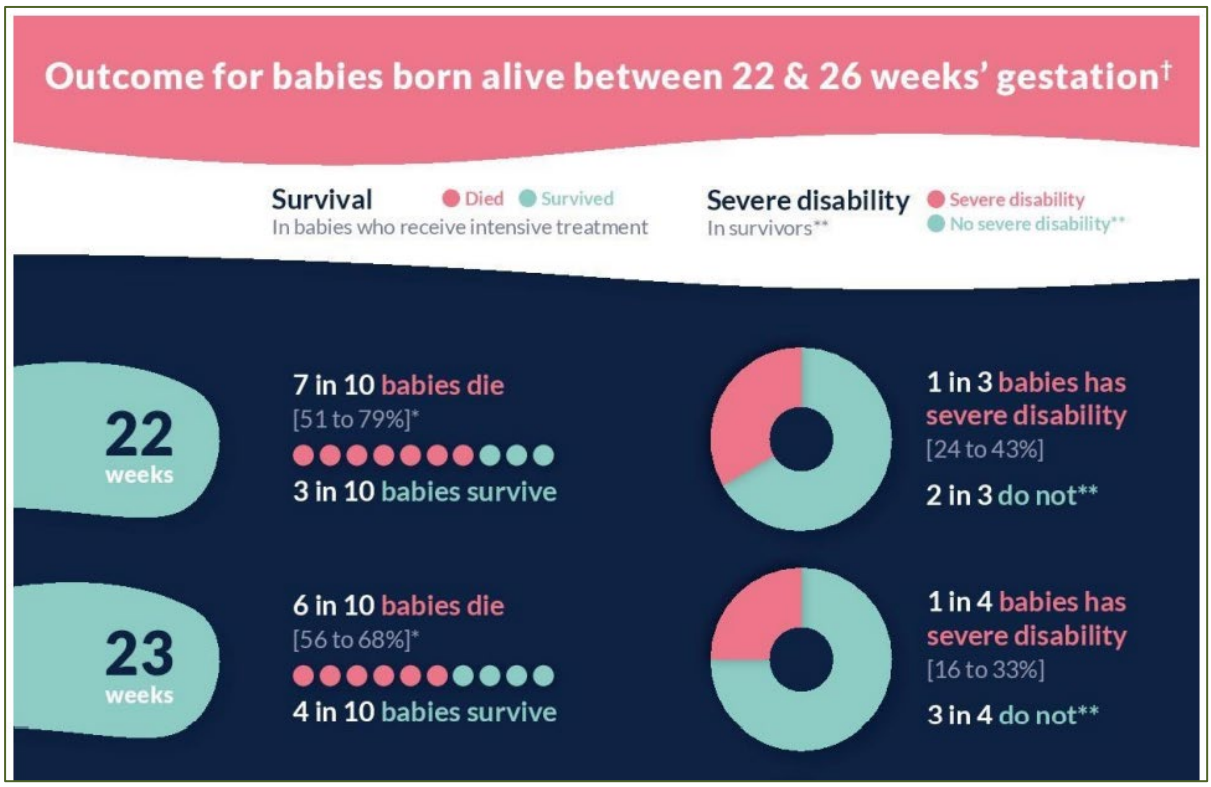
For babies with an extremely high risk of death or of survival with unacceptably severe impairment despite treatment, palliative (comfort-focused) care would be in the best interests of the baby and life-sustaining treatment should not be offered. There is no absolute indication for neonatal attendance at the birth although for individual families this may be helpful.

High risk:

For babies with a >50% risk of death or of surviving with unacceptably severe impairment despite treatment, it is uncertain whether active (survival focused) management is in the best interests of the baby and their family. Parents should be counselled carefully and parental wishes should inform a joint decision to provide either active or palliative treatment. Ideally, a senior neonatal clinician who has previously met the parents will be available to attend the birth and supervise implementation of the agreed plan.

Moderate risk:

For babies with a <50% risk of death or of survival with unacceptably severe impairment, active management would be in the best interests of the baby. A senior neonatal clinician should attend the birth.



(BAPM 2019)

Less than 22+0 weeks

Parents should be counselled by the obstetric team that their baby cannot survive at this gestation thus it is standard practice for resuscitation not to be carried out. Parents should be informed that their baby may attempt to gasp and move when born, will be kept comfortable and treated with respect, dignity and love.

Uncertain gestation

If the gestation is uncertain, or where there is parental request for resuscitation, they should be given the opportunity to discuss management with the neonatal team. A plan of care should be agreed and documented including the implications of signs of life being seen and any decision to attempt resuscitation. This would not automatically mean that the baby is resuscitated; the final decision lies with the neonatologist present at the birth after careful assessment of the baby. Resuscitation may be appropriate if baby is born vigorous and of an apparently good birth weight.

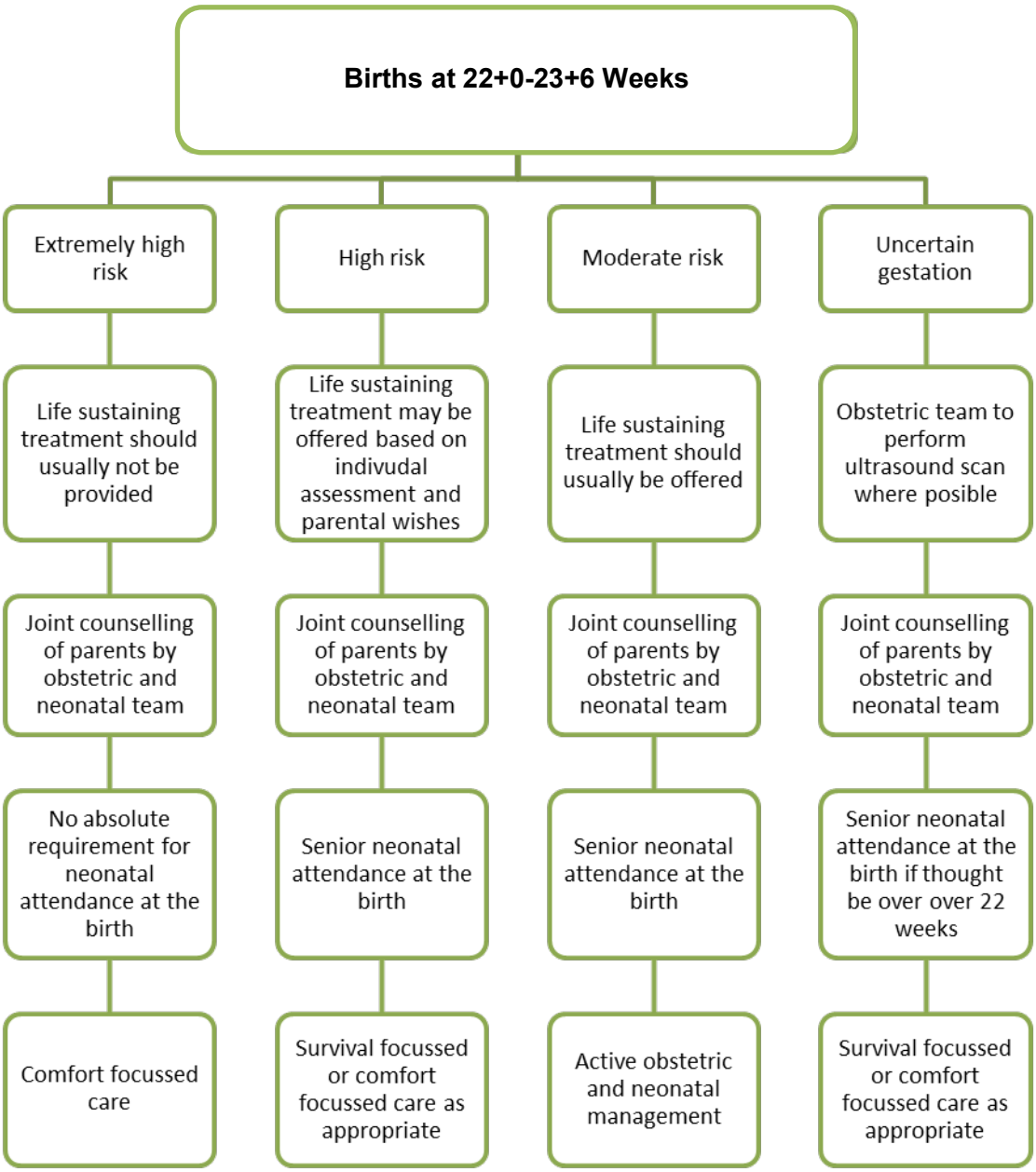


Figure 1: Care during Induction and Delivery

Active survival focussed obstetric management

When is has been agreed that life sustaining care for the baby is appropriate, active obstetric management is important to ensure the baby is born in the best possible condition. Please refer to the BAPM Perinatal Management of Extreme Preterm Birth before 27 weeks of gestation Framework for Practice (page 13). Consideration should be given antenatal steroids, magnesium sulphate for neuroprotection, tocolysis and in-utero transfer to a tertiary obstetric/ neonatal unit.

7. Signs of Life and Referral to the Coroner

At gestations from 16 weeks onwards, parents should be informed that the baby may be born with signs of life. New guidance was released in November 2020 from MBRRACE-UK. This is national clinical guidance for the determination of signs of life following spontaneous birth before 24+0 weeks of gestation where, following discussion with parents, active survival-focussed care is not appropriate.
A short training video which explains the new guidance very clearly is available at https://www.npeu.ox.ac.uk/mbrrace-uk/signs-of-life.

This guidance does not apply in the following situations:

- medical termination of pregnancy
- spontaneous birth of uncertain gestation
- spontaneous birth at 22+0 to 23+6 weeks' gestation where active survival-focussed neonatal care is planned.

The midwife/nurse or other attending health care professional may observe for visible signs of life while holding or wrapping the baby and handing them to the parents (if the parents wish to hold the baby). Subsequent observation for signs of life should be discreet and respectful.

Assessment should be based on persistent, readily evident, visible signs. Listening for a heartbeat with a stethoscope or palpation of the umbilical cord is not necessary. Evident signs of life after birth would include one or more of the following:

- easily visible heartbeat seen through the chest wall
- visible pulsation of the cord after it has been clamped
- breathing, crying or sustained gasps
- definite movement of the arms and legs.

Since fleeting reflex activity including transient gasps, brief visible pulsation of the chest wall or brief twitches or involuntary muscle movement can be observed in babies that have died shortly before birth MBRRACE-UK recommends that such fleeting reflex activity observed only in the first minute after birth does not warrant classification as signs of life[15].

Babies born with signs of life should be seen by a doctor at the earliest opportunity, so that in the event of a live birth and subsequent death, a neonatal death certificate may be issued to the mother. A medical certificate of cause of death may only be signed by a registered medical practitioner and cannot be signed by a midwife or other attending health care professional. Where a doctor has not witnessed the baby showing signs of life but signs of life have been observed by either the midwife /nurse and/or the parents, a doctor must notify the coroner before a neonatal death certificate can be issued.

The coroner must be notified of all babies born with signs of life following a termination of pregnancy.

If using this guidance in England but outside of the Greater Manchester area please check local coroner reporting criteria. The referral should be made electronically or by telephone depending on local policy. An example of a Coroners Referral form can be found in appendix 2. The coroner will advise on an individual case basis whether a coronial review of the death is required. The outcome of the discussion should be documented in the appropriate section of the ICP.

8. Management of a Baby Born with Signs of Life where Active Survival-Focused Care is not Appropriate

The baby should be treated with dignity, respect and love and comfort care should be provided. Wrap the baby to keep the baby warm and provide the option of family holding the baby. If the family do not wish to see or hold the baby place the baby in an appropriate size Moses basket in an alternative and private environment. A healthcare professional should remain with the baby and the time of death clearly documented.

9. Registration and Certification

Neonatal Death

When a baby is born with signs of life and subsequently dies, by law, two registrations are required, regardless of gestation; a live birth and subsequent neonatal death.[16] In this situation there is also a requirement for a burial or cremation.

The North West Neonatal Palliative Care website is an excellent resource, with the relevant documents for management of neonatal death. NW Neonatal Palliative Care Guideline (December 2020)

Miscarriage

If a baby is born without exhibiting signs of life before 24+0 weeks this should be classified as a miscarriage. In the absence of signs of life, legal certification is not required however the parents may wish to have a certificate of birth to commemorate their baby and this should be offered. Sands has several certificates for use, the relevant one should be chosen depending on whether it is to be issued to a single parent (mother or father), a heterosexual couple or a same sex couple (see available certificates in appendix 3).

Multiple Pregnancies

When fetal demise in a multiple pregnancy has been confirmed by ultrasound before 24 weeks but birth is after 24 weeks, such as in the case of a single twin demise, fetus papyraceus or multifetal pregnancy reduction, the demised fetus should **NOT** be registered as a stillbirth with the registrar even though it was delivered from the mother after 24 weeks.[17]

MBRRACE-UK

MBRRACE-UK is a national collaborative programme of work involving the surveillance and investigation of maternal deaths, stillbirths and infant deaths. Under 24 weeks, deaths eligible for notification at: www.mbrrace.ox.ac.uk are:

- **Late fetal losses** – the baby is born between 22^{+0} and 23^{+6} weeks of pregnancy showing **no** signs of life, irrespective of when the death occurred. Both date of birth and date of confirmation of death should be reported for these cases.
- **Terminations of pregnancy** - resulting in a pregnancy outcome from 22^{+0} weeks gestation onwards, **plus** any termination of pregnancy from 20^{+0} weeks which resulted in a live birth ending in neonatal death. [14]
- **Early neonatal deaths** – death of a live born baby (born at 20 weeks gestation of pregnancy or later or 400g or more where an accurate estimate of gestation is not available) occurring before 7 completed days after birth.

Each maternity unit will have a designated person responsible for reporting relevant fetal losses to MBRRACE-UK, for example the bereavement midwife or pregnancy loss co-ordinator. MBRRACE-UK notifications should be completed within 7 working days as per National Perinatal Epidemiology Unit (NPEU) report (October 2021).

10. Spontaneous Second Trimester Miscarriage

For women who spontaneously miscarry, please see Section 15. Care During Giving Birth onwards.

11. Medical Management of Second Trimester Intra-Uterine Fetal Death

Purpose and Scope

This section is designed to assist nurses, midwives, obstetricians and gynaecologists in the medical management of second trimester miscarriage. This section should not be implemented until a robust diagnosis of miscarriage has been made.

In certain clinical situations the maternal medical condition will necessitate expediting the delivery. Problems related to delayed birth are intrauterine infection if the membranes are ruptured or disseminated intravascular coagulopathy if the fetus is dead for more than 4 weeks.[18,19]

Timing

Urgent delivery may be required if there is **sepsis, significant bleeding** or in some cases of **ruptured membranes.**

The method of induction under these circumstances should be customised to the presenting condition and other patient factors including past obstetric and past medical history.

Investigations to be performed at presentation

- Check FBC, clotting screen, consider Group and Save.
- Consider Kleihauer (irrespective of maternal blood group), to assess for and quantify feto-maternal haemorrhage if clinical suspicion eg history of trauma to the abdomen, antepartum haemorrhage, known vasa praevia.
- Infection screen (HVS, endocervical swabs, throat swabs, MSSU, CRP, blood cultures) should be performed if maternal infection is suspected, particularly in the presence of pyrexia, flu-like symptoms, abnormal liquor or prolonged rupture of membranes.
- Infection is more likely to occur when the cervix is dilated, if the membranes are ruptured or if the uterine contents have protruded through the cervix.
- Antibiotic administration should be considered on an individual basis.

If the above have been excluded, a senior clinician should discuss the timing and process with the mother and offer a choice of induction of miscarriage or expectant management. If the mother chooses expectant management, then arrangements for review should be made.

- If induction is delayed >48 hours repeat FBC and clotting screen weekly
- Also advise that if expectant management is performed the appearance of the baby may deteriorate

- All mothers should be given a 24-hour contact number for the relevant ward or clinical area if they are managed as an outpatient for any time between diagnosis and birth
- Advice should be given to return to hospital should the mother experience symptoms such as abdominal pain, vaginal bleeding or have any concerns about her well-being
- Vaginal birth is the recommended mode of birth at gestations under 24 weeks. Extremely rarely a hysterotomy may need to be considered due to:
    - Unsuccessful attempts at induction
    - Deteriorating maternal condition (eg. haemorrhage or sepsis)
    - Other obstetric indications such as multiple previous Caesarean sections, placental site, morbidly adherent placenta or previous trachelectomy with trans-abdominal cerclage.

The decision regarding mode of birth in such complex cases should be made in consultation with a Consultant Obstetrician.

Consent

Written or verbal consent should be obtained and documented in line with local trust guidance prior to commencing the induction process.

12. Drug Information

A combination of mifepristone and misoprostol is recommended as the first-line pharmacological intervention for induction in second trimester miscarriage. One report found that the combined use of mifepristone and misoprostol was not only safe but also had an average time-to-birth interval less than other induction regimes.[20] [21]

Mifepristone

An anti-progestogenic steroid is used as pre-treatment. It facilitates uterine response to subsequent administration of a prostaglandin and takes time to work so is usually given before prostaglandin**.**

Contraindications include – uncontrolled or severe asthma, chronic adrenal failure and acute porphyria.

Cautions – asthma, risk factors for cardiovascular disease, prosthetic heart valves or endocarditis and haemorrhagic disorders.

This drug can only be administered in maternity units. Women should be observed when taking this medication.

Misoprostol (prostaglandin E1)

In the second trimester of pregnancy this is as effective as other prostaglandin preparations.[22] Advantages over other synthetic prostaglandin analogues are its low cost, long shelf-life, lack of need for refrigeration and worldwide availability.

Cautions – inflammatory bowel disease, conditions that are exacerbated by hypotension (e.g. cerebrovascular or cardiovascular disease)

Side effects include fever, nausea, vomiting, abdominal cramping, and diarrhoea. **These are less common if the tablets are given vaginally.**

Serious complications, including uterine rupture, major haemorrhage and cervical tear are rare.

13. Pre-Induction of Miscarriage

At all gestations, regardless of whether there is a uterine scar, a single dose of **200 milligrams oral mifepristone** is given after which the mother should be allowed home wherever possible**.**

Arrangement should be made for admission to hospital 24 hours to 48 hours later (or sooner) if:

- the woman experiences pain or bleeding or has concerns
- she develops an indication for urgent delivery

There is no evidence against earlier induction of labour following mifepristone – induction can occur anytime from 6 hours to 48 hours after administration.

14. Induction of Miscarriage

The required amount of misoprostol not only decreases with increasing gestational age but has also been found to be lower in women where the fetus has died in utero.[23]

Vaginal assessment should be performed prior to commencing vaginal misoprostol. The vaginal route is recommended due to the lower incidence of side effects.

Misoprostol is available as 200 microgram scored tablet.

Induction Regime Table

<table>
<tr><th></th><th colspan="2">Fetal Loss
13+0 – 23+6 weeks</th><th colspan="2">Termination of pregnancy
13+0 – 23+6 weeks</th></tr>
<tr><td>Pre-Induction</td><td colspan="4">Mifepristone
200 milligrams oral once only</td></tr>
<tr><td colspan="5">Normal interval between mifepristone and misoprostol is 24 hours to 48 hours though this can be shortened if clinically needed.</td></tr>
<tr><td></td><td>Unscarred uterus</td><td>Scarred uterus</td><td>Unscarred uterus</td><td>Scarred uterus</td></tr>
<tr><td>Induction</td><td>Misoprostol 200 micrograms, 6 hourly, for 4 doses, pv</td><td>Misoprostol 100 micrograms 6 hourly, for 4 doses, pv</td><td>Misoprostol 400 micrograms, 3 hourly, for 5 doses, pv</td><td>Misoprostol 200 micrograms, 3 hourly, for 5 doses, pv</td></tr>
<tr><td colspan="5">Vaginal route preferable due to lower incidence of side effects.
(Avoid vaginal route if bleeding or signs of infection)
Misoprostol can also be given sublingual (under the tongue) or buccal (in the cheek).
Individual maternity units may choose to follow local protocol</td></tr>
<tr><td colspan="5">If there is a delay in delivery of the placenta by more than 30 minutes after the birth of the fetus, an additional dose of misoprostol can be given.</td></tr>
</table>

If the membranes have ruptured an oxytocin infusion may be considered as the method of induction if the cervix is favourable.

If birth of the fetus is not achieved after the maximum dose of misoprostol, further management should be discussed with the Consultant Obstetrician / Gynaecologist and a repeat course of misoprostol considered 12 hours after the last dose.

Scarred uterus

The risk of uterine rupture with misoprostol, although small, is increased in women with a second trimester fetal loss and one or more previous Caesarean sections or other uterine scars. This should be discussed with the parents. The misoprostol doses should therefore be halved for women with a previous caesarean section (see table above).

All staff should be vigilant to clinical features that may suggest uterine scar dehiscence or rupture, such as maternal tachycardia, atypical pain, vaginal bleeding, haematuria and maternal collapse.

Women with ruptured membranes

There is no evidence in the literature as to an optimal regime for induction when the cervix is dilated and/or the membranes are ruptured. Although logically in such situations avoidance of multiple digital examinations may reduce the risk of ascending infection, there is a lack of evidence to guide practice. In such circumstances, and if the clinician wishes to avoid the use of vaginal misoprostol, intravenous oxytocin may be considered after discussion with a Consultant Obstetrician / Gynaecologist. A recent randomised prospective trial has shown that oxytocin is as efficient as misoprostol in inducing labour in second trimester miscarriage. However, the oxytocin regime has a longer mean time to birth. [24]

15. Care During Labour and Birth

Women with a second trimester pregnancy loss (miscarriage or termination) should be admitted to a place of care where their emotional and physical needs can be taken into account without compromising safety.

Efforts should be made to provide continuity of care and carer. Care should be given by an experienced midwife or nurse. In a maternity setting, this should be the same as normal care in labour as per trust policy including use of partogram and maternal observations.

Ideally one to one care should be facilitated at least for the first 24 hours to support the mother and the family and complete the necessary paperwork, though this is aspirational and may not always be possible during times of high activity in the maternity unit. The partner/family should be able to remain with the mother as long as she wishes.

Blood tests including full blood count (FBC), clotting screen and group and save should be performed.

It is recommended that the woman uses a bedpan whilst using the toilet during the induction process and during labour, especially at earlier gestations.

Analgesia

Adequate analgesia should be offered. All usual modalities should be made available, including epidural at later gestations (when the clotting profile has been confirmed as satisfactory). If intramuscular opiate analgesia is chosen, then diamorphine should be used in preference to pethidine as it provides better analgesia. Fentanyl patient-controlled analgesia (PCA) is also an acceptable choice in pregnancy loss, as there is no concern about accumulation in the baby.

Sepsis

Women with sepsis should be treated with intravenous broad spectrum antibiotics including cover for Chlamydia (if clinically high risk) after sepsis screening investigations have been performed.

e.g. I.V cefuroxime 1.5g + metronidazole 500mg 8 hourly + azithromycin stat dose 1g orally

If allergic to penicillin, give I.V clindamycin 900mg 8hourly.

Women with a second trimester loss and GBS colonisation of the vagina **do not require** antibiotic prophylaxis in labour.

Third stage

The third stage should be managed actively in accordance with local guidance. Syntometrine (ergometrine 500 mcg/5IU oxytocin) 1 ampule IM or oxytocin 10 units IM can be used.

Women should be informed that there is a higher incidence of retained products of conception (RPOC) compared to first trimester miscarriage especially at gestations of 13-20 weeks. North West regional audit data (2019 and 2020) suggests that the incidence is 20%. A low threshold for evacuation of retained products of conception (ERPC) should therefore be adopted if the placenta or membranes appear incomplete or if the woman experiences excessive bleeding.

If there is a delay in delivery of the placenta by more than 30 minutes after the fetus the bladder should be emptied and an additional dose of misoprostol can be given. If there is a delay in completion of the third stage of more than one hour, surgical intervention should be considered. Informed written consent should be sought from the woman after explaining uncommon surgical risks including uterine perforation (1%), cervical tears, intra-abdominal trauma (0.1%), haemorrhage and infection.

Thromboprophylaxis

A thromboprophylaxis risk assessment should be performed. Whilst miscarriage and termination do not increase the risk of venous thromboembolism per se, associated

complications may increase the risk (eg haemorrhage, sepsis.) Low molecular weight heparin should be prescribed if required as per local guidance.

If DIC is present, then ensure this has been successfully managed and discuss the initiation of thromboprophylaxis with a haematologist.

Pregnancy suppresses the protein S and protein C levels and therefore results for analysis of these two factors will not be reliable if taken around delivery. Also, lupus anticoagulant and anticardiolipin antibodies should only be considered significant if two analyses show positive results 3 months apart. Any antiphospholipid screen (APS) screen should include anti B2GP1 antibodies with lupus anticoagulant and anticardiolipin antibodies as per the Sapporo International consensus statement on an update of the classification criteria for definite antiphospholipid syndrome (APS)[25].

Anti-D Prophylaxis

Anti-D should be administered to non-sensitised Rhesus negative women after birth as per national guidance, unless non-invasive prenatal testing for fetal Rhesus status has been performed and the fetus is known to be Rhesus negative.

16. Care of Baby

The individual needs of each family should be identified and accommodated. Assistance should be given to facilitate the grieving process including empathic care, appropriate literature and contact telephone numbers.

Contact with baby

Parents should be given the option of seeing and holding their baby whatever the gestation. Some parents may wish to see and hold their baby immediately after birth, others may prefer to wait and some will decline; their decision should be respected. At earlier gestations parents should be prepared for their baby's appearance. Parents are free to change their minds and can ask for their baby to be brought to them whenever they feel ready. Parents may wish other family members to be given opportunity to see/hold baby.

Parents should be offered the use of a cooling cot or cuddle cot if available/appropriate.

Staff should also make the couple aware that the gender of the baby may not be easily identified at earlier gestations. Hence, in cases of uncertainty, the fetal gender should not be assigned. The parents may decide to choose a neutral name for baby.

Mementos

Mementos include hand and foot prints (though these may not be possible at earlier gestations), cord clamp, identity band. Most parents welcome these tokens and they can be presented in memory boxes.

Many charities offer memory boxes to record and store mementos obtained (for example 4Louis, SIMBA). If parents are not ready to take mementos and/or photographs home, these can be sealed in an envelope so that they can look at them in their own time or can be stored in hospital records if the hospital have the facility to do this.

Photographs of baby

Photographs of the baby are valuable and can be taken with the parents' own camera, with the hospital digital camera, or by medical photography. If there is a multiple birth, offer to take photographs of the babies together and/or separately. If parents own film/disposable camera is used, it is advisable that parents inform film developers that the film is of a sensitive nature.

Taking photographs with the hospital digital camera requires parental verbal or written consent. Identification of the start and end of a series of photographs must be performed. Similarly, verbal or written consent is required for photographs to be taken by medical photography.

The Butterfly Project - supporting parents who have lost a baby from a multiple pregnancy

Parents who have suffered a bereavement from a twin pregnancy (or higher order multiple) face the difficult challenge of dealing with the bereavement, while often simultaneously feeling anxious about the prognosis for surviving multiples. They differ from parents who have lost a singleton in many ways, but one important difference is that parents who have lost a twin born prematurely often remain in hospital for weeks or months while the surviving twin is cared for on SCBU.

Staff attitudes, behaviours and actions have a huge impact on parents both in the short and longer term. Generally, parents appreciate it when staff acknowledge that a surviving baby is a twin, and value the importance of knowing about the circumstance of the loss (e.g. when did it occur) as well as the name of the baby who died.

The Neonatal Research Network www.neonatalresearch.net/butterfly-project have developed two concepts:

1. A small sticker of a butterfly that can be put on the front of the mother's notes, including hand held notes, where the loss happens before birth. Where the loss happens after delivery the butterfly could be placed on the medical notes of the surviving twin. However, check with your hospital that this is allowed.

2. A butterfly symbol that is placed inside of, or next to the incubator or cot of any surviving babies. We have found that most parents like to write the name of the baby who died on the card. Remember to individualise care – some parents may not wish for this.

For more information see appendix 8.

17. Postnatal Care of Mother

Psychological support

All parents and siblings should be offered bereavement support and counselling; this could be from a Bereavement Support Midwife, Specialist Nurse or Midwife or counsellor who can provide support from diagnosis of the miscarriage until well into the postnatal period. They will also be able to offer continuity and psychological support in subsequent pregnancies. Information of support organisations and groups should be offered. If the woman has ongoing psychological concerns or a known psychiatric disease the General Practitioner and Health Visitor should be made aware of this.

As soon as practically possible, involve your Trust's Bereavement Midwife, Specialist Midwife or Counsellor to provide ongoing support.

There is an additional online resource which may be useful for parents, family, friends and health professionals called "Babies born too soon: Parents' experiences of losing a baby at 20 to 24 weeks of pregnancy". This can be found at www.healthtalk.org/20-24.

Lactation

Suppression of lactation should be discussed if 18+0 weeks or over and cabergoline 1 milligram **may** be administered orally, unless there is maternal hypertension/pre-eclampsia or puerperal psychosis. For rarer contraindications see the ICP (page 26).

Some mothers choose to continue to express milk following the loss of their baby. While this option does not suit everyone, some families find comfort in continuing to express and donate. Healthcare professionals should discuss the option of milk donation with bereaved families to help make a decision that feels right for them. Further information can be found at https://www.milkbankatchester.org.uk/donate/donationafterloss, the North West human milk bank.

Parents should be informed that there is a strict screening process. Sometimes the bank may be unable to accept milk if the mother has taken certain medication. Some medication may be safe when breastfeeding however may not be acceptable for donation purposes. Parents should also be informed that the milk bank is unable to accept milk if anyone in their household smokes. If a bereaved mother expresses a wish to donate, the first step is to contact the milk bank. They will talk the family through the donor recruitment process and answer any questions. Alternatively, parents can fill in the online screening form using the above link.

Contraception

Contraception should be discussed before discharge home.

18. Investigation of Miscarriage

The aim of investigation is to determine the cause of miscarriage. Investigations are closely aligned with the investigations following a stillbirth. There should be clarity as to who is responsible for reviewing and acting upon the results of tests ordered. Establishing a cause and effect relationship may be difficult. Causation is well established for chromosomal and fetal structural problems. However, depending on how extensively the woman wishes to be investigated, the cause of second trimester loss may remain unexplained in up to half of cases.[1]

Causes include fetal structural abnormalities, chromosomal abnormalities, maternal uterine abnormalities and cervical insufficiency or incompetence.[26] Many studies have shown weak associations between pregnancy loss after 20 weeks gestation and Factor V Leiden mutation, protein S deficiency and the prothrombin G2021 mutation.[27] Antiphospholipid antibodies can cause placental thrombosis resulting in an increased risk of second and third trimester pregnancy loss.[28] However, there is debate regarding performing full thrombophilia screening routinely at a cost of £250, when the result would not change management as there is insufficient evidence to support the use of LMWH in a subsequent pregnancy.[29, 30, 31, 32]

Infection has been implicated in 10-25% of second trimester pregnancy losses.[33] Many infectious agents have been suggested, including bacteria, spirochetes, protozoa, viruses and fungi.[34] Bacterial vaginosis has been associated with second trimester pregnancy loss and treating it may reduce risk of late miscarriage in women with a history of preterm birth.[35, 36, 37]

Post mortem examination and placental histology should be offered to all women who experience a second trimester miscarriage. It is recommended that all post mortems and all placental histology from pregnancies 16+0 weeks or above should be processed by pathologists with expertise in perinatal pathology. Within Greater Manchester this is the perinatal histopathology service at Royal Manchester Children's Hospital. Below 16+0 weeks if no post mortem is requested, placental histology should be carried out locally. Within Cheshire and Merseyside the perinatal histopathology service is at Alder Hey Children's Hospital.

Gestation should not determine whether a post mortem is offered, though parents and clinicians should understand that the information gained at early gestations might not be as helpful. To support parents to make an informed decision regarding post mortem examination, see appendix 4.

If parents decline a post mortem the placental examination is vital. Even if nothing specific is identified on placental histology the negative finding is always useful. The placenta may, however, show an unexpected positive finding that may have implications especially in cases such as recurrent pregnancy loss as part of an undiagnosed autoimmune spectrum. Chronic histiocytic intervillositis (CHI) is a rare, inflammatory condition of the intervillous

spaces, characterised by extensive maternal infiltration of inflammatory cells and fibrin deposition. It is associated with pregnancy loss in all trimesters, fetal growth restriction and recurrent pregnancy loss, due to the high recurrence rate. It is a histological diagnosis, characterised by CD68 immunostaining[38.] See section on Follow Up Visit for the details of the recommended medication regime in a subsequent pregnancy Further advice may be sought from the Rainbow Clinics at MFT or Liverpool Women's Recurrent Miscarriage clinic.

Before offering any investigations, a history should be taken to appreciate the clinical presentation to guide investigations. Under-investigation impedes efforts at gaining an accurate diagnosis however unfocussed investigation could yield results which were not contributory to the loss, thus clinicians should consider the clinico-pathological correlation between abnormal investigation results and the clinical condition.

Investigation Following Termination of Pregnancy

Where there is a known or suspected fetal abnormality, the need for further investigations should be advised by a Consultant Obstetrician (see ICP). Further investigations may not be required for some conditions.

The following investigations should be offered to ALL parents experiencing a miscarriage:

1. Screen for fetal infections

a) Placental swabs from the maternal surface only
b) Maternal serology for TORCH screen and parvovirus B19

2. Placental pathology (appendix 5)

This is recommended even if post mortem examination is declined (see previous page). Swabs and cord samples (if appropriate) should be taken prior to placing the placenta in formalin (in accordance with local policy) with the excess drained off prior to transport. The appropriate placental pathology request form should be completed and sent with the placenta as per local policy.

In Greater Manchester, if no post mortem is requested, placental histology should be carried out locally at gestations below 16+0 weeks. If 16+0 weeks or above, or at any gestation if a post mortem is requested, the placenta should be processed by the perinatal histopathology service at Royal Manchester Children's Hospital.

For Cheshire and Merseyside, placental histology is carried out at Alder Hey Children's Hospital.

3. Post mortem examination

Post mortem should be offered to all parents who experience a second trimester loss, though the information obtained may be more limited at early gestations. Post mortem can be full, when all organs are examined, or limited to specific locations e.g. head, chest or abdomen.
The parents should be provided with post mortem patient information leaflets – examples can be found at:
http://www.hta.gov.uk/licensingandinspections/sectorspecificinformation/postmortem/pe

rinatalpostmortem/thesandsperinatalpostmortemconsentpackageincludingformdownloads.cfm

Offer the parents the opportunity to discuss their options. If a post mortem is accepted, informed written consent should be taken by an appropriately trained individual. See appendix 6 for consent forms and help sheet.

Selective Investigation (only perform if there is a clinical indication):

1. If Rh negative or clinical suspicion

Kleihauer for assessment of the volume of feto-maternal haemorrhage is required when a woman who is D negative experiences a potentially sensitising event after 20 weeks' gestation and after the birth of a D positive baby. Initial screening should be carried out by a Kleihauer test irrespective of Rhesus status to identify and quantify feto-maternal haemorrhage. This should be taken as early as possible after presentation, especially if trauma to the abdomen, antepartum haemorrhage, pale baby, known vasa praevia. As a Kleihauer is not routinely performed for Rhesus positive women, the clinical reason should be clearly documented on the request form. The request may need to be discussed with laboratory staff and the reason for the request explained to minimise the chance of sample rejection in a Rhesus positive mother.

2. If 16+0 weeks and above

External examination of the baby should be offered.
A detailed external assessment should be possible from 16 weeks.
See page 14 of the ICP.

3. If the mother has fever, flu-like symptoms, abnormal liquor (purulent or offensive) or prolonged ruptured membranes

Maternal infection screening should be performed including

- Listeria monocytogenes and Chlamydia spp
- Maternal blood cultures
- MSSU
- HVS
- Endocervical swabs
- Coronavirus swab
- Influenza swab

4. If fetal anomaly diagnosed or chromosomal abnormality suspected

(a) Offer fetal chromosome analysis (with the exception of an isolated neural tube defect). If parents accept, they should sign the relevant box on page 17 in the ICP. Place 2-3cm of umbilical cord in a leak-proof, dry, sterile, plastic container, or sterile saline if stored overnight (not formalin). The container should be carefully labelled, wrapped with absorbent material and placed in a sealable polythene sample bag.

Do not send cord samples routinely or if prenatal testing by chorionic villus sampling (CVS) or amniocentesis has been performed and a result obtained. Do not send purely for fetal sexing. See appendix 6 for full referral criteria. If in doubt contact the cytogenetics service. For Greater Manchester, this is St Mary's

Hospital on 0161 276 6553. For Cheshire and Merseyside this is Liverpool Women's Hospital 0151 702 4229.

If there is no identifiable or obtainable umbilical cord
Take a 2cm^3 sample of placenta and send in saline to cytogenetics lab as soon as practically possible. This needs to be performed even if proceeding to post mortem examination or clinical genetic examination.

(b) Genetic examination of the baby should be offered (with the exception of isolated neural tube defects such as spina bifida or anencephaly or other abnormalities which are unlikely to have a genetic cause). This should be discussed with clinical genetics. For Greater Manchester this is St Mary's Hospital 0161 276 6506. For Cheshire and Merseyside, this is Liverpool Womens Hospital 0151 702 4228/4229. The post mortem consent form should be used to obtain consent for this examination. The baby should be transferred dry to the mortuary who will arrange transfer to the appropriate hospital by the trust contracted funeral directors.

5. If history suggests maternal substance abuse

Maternal urine for cocaine metabolites (maternal consent required)

6. If hydrops fetalis is present

- Red cell antibody screen
- Maternal anti-Ro and anti-LA antibodies (also test if PM shows endomyocardial fibroelastosis or AV node calcification)

7. If fetal intracranial haemorrhage (on post mortem examination)

Maternal alloimmune anti-platelet antibodies. Blood samples are required from mother and father.

8. If there is:

- No obvious cause
- Fetal loss without PPROM or preterm labour
- Fetal growth restriction
- Placental abruption

- Thrombophilia screen
- At the time of the birth: Lupus anticoagulant, anticardiolipin antibodies, B2GP1 antibodies, Factor V Leiden, Prothrombin gene variants, Protein C, Protein S, Antithrombin
- If anticardiolipin antibodies or Lupus anticoagulant were positive at the time of birth they should be repeated 12 weeks after delivery. Protein S is usually low in pregnancy so may also need repeating to ensure it has normalised
- Thyroid function tests
- HbA1C (both can be taken following delivery)

Please note:

Parental chromosomes are not routinely required. They should be obtained **only if**:

- Fetal chromosomal analysis shows an unbalanced translocation
- Fetal chromosome analysis fails with a fetal abnormality on ultrasound or post mortem
- If suggested by the genetics team on the fetal chromosome report

19. Further Management of Baby Including Transfer and Funeral Arrangements

Inform the parents where the baby will be taken once they go home.

Transfer of baby to the mortuary

Allow parents the time they wish to spend with their baby before transferring the baby to the mortuary. Prior to transfer, ensure two name bands are completed stating “baby of (mother’s name), mother’s hospital number, date and time of giving birth as well as the hospital the baby was born at ”. Attach one name band to the baby. At earlier gestations place the name band around baby’s abdomen.

Some trusts wrap the baby in a sheet or infant body bag, ensuring that all body parts including the face are covered. The second name band should be attached or inserted into the transport window of the infant body bag (if used). If any personal items, such as a teddy bear, or any jewellery items are to accompany the baby, then these should be labelled with baby’s identification bands.

Arrange transfer and if parents wish to accompany their baby, notify the Anatomical Pathology Technician (APT) first and other relevant staff eg bereavement midwife, mortuary staff, security. A member of maternity staff must accompany the family.

Taking baby home

Occasionally the family may wish to take their baby home. This is not always ideal as the baby may deteriorate rapidly and parents should be informed of this, especially if they wish to have a post mortem. The parents’ wishes should be supported. There is no legal reason why they cannot take their baby home or directly to the funeral directors of choice. The baby must be taken home in an appropriate casket or Moses basket. The transport home must be appropriate i.e. private not public transport. The mortuary must be informed if the parents are taking their baby home. Local policy should be followed and relevant paperwork completed.

Some hospices offer the use of a cold room facility (see appendix 9). This allows the family to stay with the baby and say goodbye in a supportive environment. This is a place where babies can lay at rest after their death until the day of their funeral. See Hospice-Information.pdf (neonatalnetwork.co.uk)

Whilst there is no legal requirement to bury or cremate babies who are miscarried <24 weeks’ gestation, many families will wish to. There is a legal requirement for a cremation or burial where signs of life have been present but there follows a neonatal death. Please refer to local policy.

Parents should be given details of the options available, which may depend on gestation and the contract held with the funeral director and the crematorium, but include hospital cremation, private burial or private cremation. Some hospitals offer both individual cremation and shared cremation. In a shared cremation, several babies are cremated at the same time.

If the parents would like the hospital to help them with the funeral arrangements, refer to local hospital policy. Document what arrangements are likely to be carried out. Complete a 'Medical Form for Cremation or Burial' and send to the dedicated individuals in your trust i.e. mortuary or bereavement centre. If the family are arranging their own funeral the certificate of disposal should be sent with the family who should be advised to give it to their funeral director.

If a hospital cremation is chosen, ask the parents what they wish to do with the ashes. If they wish to collect them advise when and where this will occur. If they do not, or if the Trust policy is to scatter ashes in a designated place e.g. baby garden, ask the parents if they wish to know when this will occur. At very early gestations, or if the hospital offers shared cremation only then the parents should be informed that there will not be any individual ashes to collect.

Further advice and information on sensitive disposal of fetal remains can be found in the frequently asked questions section of the Human Tissue Authority website: https://www.hta.gov.uk/faqs/disposal-pregnancy-remains-faqs

After discharge

After the parents have returned to their home environment, they can arrange to return to hospital to see their baby if they wish. Follow local policy to advise the parents who they should contact to make arrangements (eg bereavement office, bereavement midwife, mortuary).

When such a request is received:

1. Obtain the parents' contact number
2. Check whether the baby is still on hospital premises, especially if transferred out for post-mortem. Viewings are arranged on an individual basis.
3. Give the parents the name of the person who will meet / accompany them.
4. Check that the baby is lying peacefully; (clothes and hat for the baby if the parents wish at later gestations).

20. Other Postnatal Considerations

All outstanding appointments with midwifery, ultrasound or medical staff should be cancelled to avoid potential upset. A letter should be sent to the mother's GP to explain that she has had a pregnancy loss.

Antenatal screening results

There should be a robust method of communication with the screening midwife. First and second trimester screening results should still be communicated to the mother in the event of pregnancy loss. This must be done sensitively, for example by letter expressing condolences. See appendix 10 for a template letter.

Follow up

Discuss with the mother, when and where the postnatal follow up should take place. An appointment with the appropriate consultant obstetrician or gynaecologist should be offered, maintaining continuity where possible. Explain to the parents that it may take 12 weeks or more to receive investigation results and the post mortem report. If the parents do not wish to return to see the consultant, it is good practice to send a letter to the family and the mother's GP.

21. Follow Up Visit

Follow up of parents after a pregnancy loss is a key element of care, with an opportunity to assess maternal recovery both physically and psychologically as well as to convey information about investigations performed and agree a management plan for future pregnancies if considered in the future.

Particular care should be taken with women with a history of psychiatric illness and the vulnerable groups of women, with a high standard of communication between all health professionals such as the psychiatrist, GP and health visitor.

Preparation is essential for any such consultation as parents who have experienced a pregnancy loss should not have the trauma of an unprepared consultation added onto that experience. It should be noted what the parents' wishes are for follow up appointments.

If the parents have given the baby a name, health care professionals should use the baby's name in discussions with the family.

Prior to Consultation

1. Ensure all results are available
2. Notes of any case review are available

At Consultation

1. Results of investigations
2. Cause of miscarriage, if known
3. Pre-pregnancy plan for next pregnancy
    a. Smoking status
    b. Alcohol intake and illicit drug use
    c. Folic acid advice
    d. BMI optimisation
    e. Any psychological issues
    f. Other medical issues
        i. Medications
        ii. Pre-pregnancy medical conditions
4. Pregnancy plan for next pregnancy
    a. Book under Consultant Obstetrician
    b. Consider whether aspirin or LMWH are indicated
    c. Consider referral to preterm labour clinic for cervical length scans or cervical suture depending on presentation and likely cause of miscarriage. For future pregnancies, consider history-indicated insertion of cervical cerclage and if recurrent second trimester pregnancy loss consider transabdominal cerclage (TAC)
    d. Offer extra ultrasound scans for reassurance

e. If CHI on placental histology discuss with Rainbow Clinic at Saint Mary's Oxford Road Campus or Saint Mary's at Wythenshawe, MFT or Liverpool Women's Recurrent Miscarriage clinic for commencement of aspirin, LMWH, prednisolone and hydroxychloroquine at 7 weeks gestation after an early viability scan, followed by close ultrasound surveillance.

5. Following a second trimester pregnancy loss, inform parents of the following:
   i. Approximately a 7% risk of recurrent second trimester loss
   ii. Approximately a 25 - 35% risk of preterm birth
6. Consider extra precautions for postnatal depression
7. Write a letter to the parents as well as communicating with their GP

22. Governance

The audit standards can be found in appendix 11.

23. Support Organisations and Groups

National

ARC Antenatal Results & Choices

Support for parents whose baby is diagnosed with a fetal abnormality in pregnancy.

Helpline: 0207 713 7356 (available Tuesday & Thursday evenings 8pm to 10pm).

Website: www.arc-uk.org/

Bliss for babies born sick or premature

Family support helpline offering guidance and support for premature and sick babies.

Website: www.bliss.org.uk/

Child Bereavement UK

Supports families and educates professionals when a baby or child of any age dies or is dying, or when a child is facing bereavement.

Helpline: 0800 028 8840

Website www.childbereavementuk.org

Child Death Helpline

For all those affected by the death of a child.

Helpline: 0800 282 986 or 0808 800 6019

Website: http://childdeathhelpline.org.uk/

CRADLE

Providing a range of services to support anyone affected by early pregnancy loss

Website: Home | Cradle Charity

Cruse Bereavement Care

For adults and children who are grieving.

Helpline: 0808 808 1677

Website: https://www.cruse.org.uk/get-help

Daddies with Angels

Advice and support to male family members following the loss of a child/children.

Website: https://www.daddyswithangels.org/

Jewish Bereavement Counselling Service

Supporting Jewish individuals through loss and bereavement

Helpline: 020 8951 3881

Email: enquiries@jbcs.org.uk

Website: www.jbcs.org.uk

Lullaby Trust

Bereavement support to anyone affected by the sudden and unexpected death of a baby.

Helpline: 0808 802 6868

Website: http://www.lullabytrust.org.uk

Petals Baby Loss Counselling Charity

Free counselling service to support women, men and couples through the devastation of baby loss.

Helpline: 0300 688 0068

Website: www.petalscharity.org

Sands Stillbirth & Neonatal Death Charity

Support for families affected by the death of a baby before, during or shortly after birth.

Helpline: 0808 164 332

Website: http://www.uk-sands.org

Twins Trust

Bereavement and special needs support groups

Email: enquiries@twinstrust.org

Website: www.twinstrust.org/bereavement

The Miscarriage Association

Support for parents who have experienced miscarriage

Helpline: 01924 200799 (9am to 4pm)

Email:info@miscarriageassociation.org.uk

Website: www.miscarriageassociation.org.uk/

The Compassionate Friends UK

Offering support to bereaved parents and their families

Helpline: 0845 123 2304

Email: info@tcf.org.uk

Website: www.tcf.org.uk

Tommy's

Information and support for parents on coping with grief after having a stillborn baby. Bereavement-trained midwives available Monday to Friday, 9am to 5pm

Helpline: 0800 0147 800

Website: tommys.org/stillbirth-information-and-support

Regional

Children of Jannah

Support for bereaved Muslim families in the UK, based in Manchester.

Helpline: 0161 480 5156

Email: info@childrenofjannah.com

Website: www.childrenofjannah.com

Lighthouse Therapy Service

Post Infant Loss Support Service covering Merseyside

Website: Support Group | Lighthouses Therapy Services

Listening Ear

Free self-referral counselling to help deal with anxiety, bereavement and depression.

Helpline: 0151 488 6648

Email: enquiries@listening-ear.co.uk

Website: http://listening-ear.co.uk/

North West Forget me not's & Rainbows

Support any member of the family who has been affected by the loss of a baby, during pregnancy, at birth or afterwards.

Facebook: nwforgetmenotsandrainbows

Once Upon A Smile

Children's bereavement support

Phone: 0161 711 0339

Website: www.onceuponasmile.org.uk

SPACE

A Liverpool-based peer support network for those facing miscarriage or infertility

Website: www.thereisspaceforyouhere.com

Liverpool Bereavement Services

Provide 1:1 counselling for people who are struggling to cope with a loss.

Website: https://liverpoolbereavement.com/

Love Jasmine

Supports for families directly affected by the loss of a child providing provide practical, emotional and respite support and promote self-care to improve the emotional wellbeing of the whole family.

Phone 0151 459 4779 (Mon-Fri 930 – 1700)

Or call/text 07566 225 253

Website: https://www.lovejasmine.org.uk/

Appendix 1 - Patient information

- https://www.miscarriageassociation.org.uk/wp-content/uploads/2016/10/Late-Miscarriage-Mar-2017-1.pdf
- https://www.sands.org.uk/sands-bereavement-support-book
- https://www.sands.org.uk/sites/default/files/Sands%20Bereavement%20Support%20Book%20-%20web%20version.pdf
- https://www.rcog.org.uk/media/bdndy0sb/pi-when-your-baby-dies-before-birth.pdf
- https://twinstrust.org/bereavement/booklet.html
- Guidance on miscarriage and stillbirth for Jewish Parents

Appendix 2 - Coroner's Referral Forms

Greater Manchester and Eastern Cheshire please use

- Coroners referral form - for use by medical practitioners only | Manchester City Council

For others please refer to local policy

Appendix 3 - Miscarriage Certificates for Parents

Sands

Certificate for mothers of baby who showed no signs of life

Certificate for mother of baby who showed no signs of life

Certificate for mother and father of baby who showed no signs of life

Certificate for fathers of baby who showed no signs of life

Certificate for father of baby who showed no signs of life

Appendix 4 -Deciding about a post mortem examination: Information for Parents

Patient information

- https://www.sands.org.uk/support-you/understanding-why-your-baby-died/post-mortem-examination

Appendix 5 - Placental Pathology

Greater Manchester and Eastern Cheshire

- MFT Placental histology information sheet
- Request Form for Histopathological Examination of Placenta

Lancashire, South Cumbria, Cheshire and Merseyside

- Saint Helens and Knowsley Cytology request form
- Alder Hey Examination of Fetus request form

Appendix 6 - Post Mortem Consent Form, Request Form

Greater Manchester and Eastern Cheshire

- MFT Post mortem consent form
- MFT Post mortem help sheet for consent form
- Requesting a post mortem examination

Lancashire, South Cumbria, Cheshire and Merseyside

- https://www.liverpoolwomens.nhs.uk/media/3505/post-mortem-examination-hst-information-leaflet.pdf
- Alder Hey Post mortem consent form
- Alder Hey Examination of fetus request form

Appendix 7 - Cytogenetic Testing

Greater Manchester and Eastern Cheshire

Current forms can be printed from

- www.ManGen.org.uk/useful-forms
- Cytogenetics referral form

Lancashire, South Cumbria, Cheshire and Merseyside

Current forms can be printed from

- Genetic Laboratory Services - Liverpool Womens NHS Foundation Trust or
- Genetics referral form (Feb 2020) Liverpoolwomens.nhs.uk

Appendix 8 - Butterfly Project

https://www.neonatalbutterflyproject.org/

Appendix 9 - Information on Hospices in the Northwest

https://www.neonatalnetwork.co.uk/nwnodn/palliative-care/

Appendix 10 - Miscarriage Screening Results Letter

https://www.england.nhs.uk/north-west/wp-content/uploads/sites/48/2021/08/Miscarriage-screening-letter.pdf

Appendix 11 - Collecting feedback from families

Some units may wish to collect feedback from parents.

The feedback from women and families gathered from the questionnaire will identify aspects of care that should always happen and improvements in maternity bereavement services can be influenced through the feedback gathered from the responses.

Below is an example of one that can be used:

- Example letter to parent
- Maternity Bereavement Experience Measure (MBEM)

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