

Management of late Intrauterine Fetal Death and Stillbirth Guideline

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Brief Summary of Document:	Management of late intrauterine fetal death and stillbirth		
Scope	This guideline summarises the management of women who have a late		
	intrauterine fetal death and stillbirth. 'The term "woman/women" in the context of this document is used as a biologically based term and is not intended to exclude trans and non-binary people who do not identify as women.'		

To be read in	468 - Pregnancy Remains Following Pregnancy Less, Termination of
conjunction	Pregnancy and Stillbirth Policy
with:	620 - Postpartum Haemorrhage Guideline
	658 - Retained Placenta Guideline

Owning group

Obstetric Written Documentation Review Group Approved 18/08/2020

	Reviews and updates			
Version no:	Summary of Amendments:	Date Approved:		
1	New document	14/09/2017		
2	Guideline Update	18.08.2020		

Term	Definition
ALT	Alanine aminotransferase
AST	Aspartate transaminase
BA	Bile Acids
CLC	Consultant-led care
CLU	Consultant-led Unit
CTG	Cardiotocograph
DIC	Disseminated Intravascular Coagulopathy
FBC	Full blood Count
G&S	Group and Save
IUFD	Intrauterine fetal death
IOL	Induction of Labour
LFT	Liver function test
MLC	Midwifery-led Care
NND	Neonatal Death
PCA	Patient controlled analgesia
PET	Pre-eclampsia
PM	Post mortem
PV	Per vaginam
SL	Sublingual
VTE	Venous thromboembolism

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Keywords		
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1. INTRODUCTION

- This guideline covers definition of Late intra-uterine Death, Stillbirth and Neo Natal Death, diagnosis, management of the labour, investigations of the pregnant woman and her baby and basic information on disposal of the fetus.
- Overall the theme should be one of sensitive communication.

1.1 Definitions

NON-VIABLE FETUS	less than 24 weeks gestation and where there is no evidence of life at delivery	
	after 24 completed weeks of pregnancy of singleton fetus.	
DEATH		
STILL BIRTH	more than 24 weeks gestation and where there is no	
	evidence of life at delivery	
NEONATAL DEATH	death after live birth whatever duration of pregnancy	

2. GUIDING PRINCIPLES

- Bad news should be broken in a sensitive way.
- It is not possible to predict the significance that a childbearing loss will have for individual parents. No assumptions should be made about the intensity and duration of grief that a parent will experience. It is important that staff accept, acknowledge and validate the feelings that individual parents are experiencing.
- In any situation where there is a choice to be made, parents should be given the information they need, and should be encouraged to make their own decisions about what happens to them and to their baby. They may wish to go home and return the following day.
- Parents should always be treated with respect and dignity and should be supported with genuine sensitivity and empathy.
- Each parent's personal preferences and cultural or religious needs should be taken into account.
- In addition to good emotional support, women should receive excellent physical care during and after a loss.
- Parents whose babies die in the second or third trimester should be offered opportunities to create memories. Their individual views and wishes should be respected.

3. PROVIDING CARE FOR ANY WOMAN WHO HAS A CHILDBEARING LOSS

- Wherever possible, provide continuity of carer to give both physical and emotional support.
- Give information regarding what to expect during the process of labour, delivery and following the birth. Frequent repetition may be necessary.
- Ensure good communication between care givers (Obstetrician, Midwife, Neonatologist) and parents.
- Document choices made by parents e.g. whether they wish to see their baby, have handprints and footprints, have photographs taken.
- Discuss postmortem examination. Obtain consent, if appropriate.

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- Ensure adequate oral hydration (water or still sports drinks). Restrict solid foods when in active labour.
- Ensure checklist is commenced and filed in the notes.
- Following delivery, allow parents time and privacy with their baby if they wish. Refer to the baby by name. Members of their extended family may wish to visit. This should be facilitated.
- Parents may wish to wash and dress their baby. They may take photographs with a digital or disposable camera. If photographs are to be taken by Medical Illustration, then written consent must be obtained. Consent is also required for hand and footprints.
- Contact hospital chaplain or relevant Minister of Religion if parents request.
- Use SANDS bereavement boxes and leaflets
- Ensure baby is weighed and labelled with both parents names if their surnames are different. If the baby has been named, complete the details in a memory booklet.

Transfer parents to the separate room for on-going care as soon as possible and mother's clinical condition allows. All documentation **MUST** be completed prior to women and their families being transferred to the separate room. It is the responsibility of the labour ward midwife to ensure all the appropriate paper work accompanies the baby to either the separate room or the mortuary.

4. DIAGNOSIS OF AND CLINICAL MANAGEMENT OF INTRA-UTERINE FETAL DEMISE (Appendix 1)

- A diagnosis of intrauterine fetal demise should be by <u>ultrasound scan</u> and not by a Pinard stethoscope, handheld Doppler or CTG monitor.
- Where feasible 2 clinicians of appropriate seniority (registrar or consultant) and with training
 in ultrasound scanning should confirm the diagnosis of fetal demise (RCOG best practice).
 Careful, sensitive explanation and a flexible approach are necessary.
- Discuss care with appropriate consultant.
- There is seldom a place for caesarean section.
- Where the woman is rhesus negative a Kleihauer should be performed at presentation.
- Anti D should be given at presentation to all rhesus negative women with a IUD. The fetal blood group should be ascertained on cord blood testing.
- All women should have a Kleihauer test regardless of rhesus status and repeated at 48 hours if rhesus negative in case a larger dose of anti D is required

5. DELIVERY

- When the woman is clinically unwell, i.e. in association with an abruption, Pre- eclampsia or sepsis, she should be stabilised/ resuscitated and delivered by the safest means after discussion with the on-call consultant.
- Where the woman is well and wishes to go home, her wishes should be respected and appropriate follow-up arranged. If the decision for Postmortem (PM) has not been made at this time, the parents should be warned that the results of PM may be less helpful and that

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the baby's appearance may have deteriorated. Delivery should be encouraged within 48 hours. DIC is unlikely (10% risk after 4 weeks).

- Vaginal birth is encouraged (unless contraindicated on medical grounds).
- This is usually achieved with a combination of Mifepristone and prostaglandin (in the form of Misoprostol).
- The dosage of Misoprostol is dependent on the gestation, as the uterus becomes more sensitive to prostaglandin with increasing gestation. To achieve dosages in the range recommended by the RCOG and NICE the 100 microgram tablet must be cut into 4 with a tablet cutter to achieve 25 microgram doses.

The incidence of uterine rupture in women with previous caesarean section during Induction of Labour with misoprostol is between 3.5%-4.4% compared to unscarred uterus. Hence extra vigilance and regular monitoring is required in women with previous caesarean section.

Mechanical measures (26F Foley's catheter or Cook's Balloon) should be considered.

Effective analgesia should be provided as per woman's wishes including PCA/Epidural analgesia.

Vaginal Misoprostol is inserted in the posterior fornix and the woman is asked to remain supine for up to 1 hour after insertion.

6. MANAGEMENT OF THE WOMAN WHO HAS HAD AN IUD SHOULD BE AS PER THE FOLLOWING MISOPROSTOL REGIME:

Second Trimester		
Induce miscarriage	400 mic gm pv or sl 3 hrly (max. x 5)	
Missed miscarriage (13 to 17+6 weeks)	200 mic gm pv 6 hrly (max. x 4), second dosage could be increased to 400 mic gm (maximum of 1600 mic gm)	
 Missed miscarriage (18 to 23+6 weeks) Intrauterine fetal death (24 to 26 weeks) 	100 mic gm pv 6 hrly (max. x 4)	

Third Trimester		
Intrauterine fetal death	25 mcgs pv every 6 hours or 25mcgs orally every 2 hours	

- Inducing pregnancy termination, miscarriage and intrauterine fetal death may or may not need Mifepristone 200 mg 36 48 hrs prior to Misoprostol.
- Recent RCT reveals Mifepristone can be avoided.
- If the first cycle fails the second cycle can be started on the next day after an interval of 12 hours from the last Misoprostol.

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- The use of balloon induction can be considered in the third trimester. This discussion must take place between the patient and Consultant
- The use of oxytocin infusion can be considered

6.1 Previous caesarean section

- Women who have had a previous caesarean section can be given the above regimen after discussion with the consultant on-call.
- The use of balloon induction can be considered in the third trimester. This discussion must take place between the patient and Consultant

6.2 Retained placenta

- Complete the full course of Misoprostol as prescribed unless there is significant vaginal bleeding.
- Manage as per guideline for Retained Placenta, Management of Postpartum haemorrhage

6.3 Thromboprophylaxis

• Women should be routinely assessed for thromboprophylaxis, but IUD is not a risk factor.

6.4 Suppression of Lactation

- Suppression of lactation can be either by means of good support bra, ice packs and analgesia.
- A single dose of Carbergoline 1mg is also effective (contraindicated in PET and hypertension).

6.5 Communication and Follow Up

- Once delivery occurs the women should be allowed time to see and hold the baby as appropriate.
- Follow up should be arranged with a consultant to discuss the results as appropriate.
 Where a woman was under MLC, she should be followed up with the obstetrician who
 has taken over her care during her labour. She should be warned that the results of a
 post mortem can take up to 3 months. The notes should be sent to the appropriate
 obstetric secretary.

7. INVESTIGATIONS

- All parents should be offered full post mortem examination on their baby.
- Parents should be informed that in 50% of cases no cause can be found to establish why a
 baby has died in utero. However, where a cause can be found clearly there is positive
 benefit in managing another pregnancy for the couple.
- It should also be emphasised that even when the PM does not reveal "The Cause of Death", it can still provide useful information – even negative information (e.g. no congenital abnormalities).
- Independently of full autopsy, **placental and membrane pathology** is useful and should be offered even if a post-mortem examination of the baby is declined.

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- Post mortem examination:
- Babies who delivered before 24 weeks, should be transferred to the fetal pathology department Cardiff from the mortuary.
- Babies delivering after 24 weeks or any baby which showed signs of life (neonatal death), should be transferred to the mortuary.

8. DISPOSAL/FUNERAL ARRANGEMENTS

GUIDELINES FOR STAFF GIVING INFORMATION TO PARENTS REGARDING FUNERAL ARRANGEMENTS

 Documentation and funeral arrangements can be traumatic and confusing. Parents should be given a leaflet which reinforces the verbal information they will receive regarding funeral/ disposal arrangements. Bereavement services as per local arrangements.

STILLBIRTH AFTER 24 WEEKS GESTATION OR NEONATAL DEATH AT ANY GESTATION.

• If the fetus is >24 weeks, then it is a legal requirement that it is buried or cremated.

NEONATAL DEATH

- A fetus born at <u>any gestation</u> which shows signs of life and subsequently dies isclassed as a neonatal death.
- If a neonatal death occurs and the parents wish the baby to be cremated, a 3 part form has to be signed by two medical practitioners who have been qualified for at least five years.

9. DOCUMENTATION Post Mortem

Any fetus <24 weeks which is to have investigation and/or post mortem needs to have the following forms completed prior to disposal.

- 1. Request for investigation of fetus form. (Signed by one parent re disposal instructions).
- 2. <u>Consent</u> form for post mortem. Only obtain consent if trained, as this is a legal document and could delay the post mortem being carried out.
- Disposal of fetal remains form 'Certificate of Medical Practitioner in respect of Fetal Remains' (if fetus is for hospital disposal or private cremation. <u>THIS MUST BE SIGNED</u> BY A DOCTOR.
- 4. <u>Disposal arrangements form</u> is to accompany the baby and one copy to be filed in maternal notes.

Any fetus >24 weeks which is to have investigation and/or post mortem needs to have the following forms completed prior to a funeral.

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- 1. Request for investigation of stillbirth or neonatal death form. (Signed by one parent re disposal instructions).
- 2. <u>Consent form for post mortem.</u> Only obtain consent if trained, as this is a legal document and could delay the post mortem being carried out.
- 3. <u>Cremation of Stillborn Child</u> form (Cremation form 9)
- 4. Funeral arrangements form to accompany b filed in maternal notes.

<u>Parents should be informed that post mortem results will not be available for up to 12 weeks.</u> A follow up appointment will be arranged with the relevant consultant when the results are available.

Hospital disposal or funeral

Fetuses who are not having a post mortem examination require only disposal of fetal remains form and disposal arrangements form (<24 weeks) or Cremation of stillborn child form (Cremation form 9) and a funeral arrangements form (>24 weeks) to accompany them to the mortuary.

Stillbirth Certificate (>24 weeks)

Must be completed by attending Midwife or Doctor as soon as possible following delivery, and placed in the front of the mother's notes. It is important that the form is given to the parents before discharge. They must then register the stillbirth with the Registrar of Births, Deaths and Marriages who will give them a release form.

This has to be returned to the General Office to allow arrangements to continue if a hospital funeral has been requested. If a private funeral is being arranged, then the form must be taken to the funeral director by the parents.

Remembrance book

Parents to be given the SANDS Box and leaflets.

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- 2. Gemzell Danielsson et al UOG 2007
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- 4. WHO Recommendations for Induction of Labour 2011
- 5. FIGO Guidelines: Prevention of PPH with Misoprostol 2012
- 6. FIGO Guidelines: Treatment of PPH with Misoprostol 2012
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- 8. RCOG Guideline
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Appendix 1

CHECKLIST FOR INVESTIGATIONS				
	INVESTIGATION & SAMPLE BOTTLE	DATE TAKEN	SIGNED	
1. All Cases	 FBC (1x purple), G&S (1x pink) Coagulation screen including fibrinogen (1x fill blue bottle) Kleihauer (1x pink) Fetal post-mortem (full / limited) Cytogenetic analysis in relevant cases (2x purple) Person who delivers the baby should document: degree of maceration of skin any obvious external abnormality of features or baby's weight: IUGR/normal/macrosomia Gender and name given by parents Fetal anomaly: CARIS form to be completed 			
2. Unexplained IUD	 All of the above including: CRP (yellow), HBA1c (1x lilac) TORCH: Parvovirus, Rubella, Syphilis, CMV (1x yellow) Thyroid Function Tests (1 xyellow) Placental swab for microbiology; Placental Histology MSSU HVS or LVS. 			
3. Specific to Cause	All of 1. including: IUGR Suspected: Lupus-anticoagulant (2x blue filled to the top) Anticardiolipin antibodies (1xyellow) Factor V Leiden Prothrombin gene mutation (1x purple) Repeat thrombophilia and APLA screen 6 weeks post delivery (4x blue filled to the top) Placental Histology All of 1. including: History of Itching: LFT (1xyellow) Bile Acids (1x yellow) All of 1. including: Fetal unbalanced translocation Other fetal aneuploidy, e.g. fetal genetic testing fails and history Page 12 of 13	Version	2	

Suggestive of aneuploidy (fetal abnormality on postmorterm, previous unexplained IUFD, recurrent miscarriage):

Parental Karyotyping

- Ensure comprehensive investigation even if cause suspected
- Parents should be advised that no specific cause is found in almost half of stillbirths
- Parents should be advised that when a cause is found it can influence care in future pregnancies
- An abnormal test result is not necessarily related to the IUFD
- Correlation between blood tests and post-mortem examination should be sought. Further tests might be indicated following the results of the post-mortem examination.

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