

**Guideline on the histopathological assessment of placentas after an
adverse pregnancy outcome**

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Key Documents Owner/Lead:	Laura Veal	Consultant Obstetrician & Gynaecologist
Approved by:	Maternity Governance Meeting	
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Key Amendment

Date	Amendment	Approved by
October 2020	New Document	Maternity Governance

Histopathological examination of the placenta following a pregnancy affected by medical complications, pregnancy loss or neonatal death may provide an explanation of why this occurred. It may also provide information to help in the management of subsequent pregnancies.

All of the placentas at Worcester Hospital are sent off to Birmingham Women’s Hospital. Unfortunately, due to a significantly reduced perinatal service, histological assessment on live birth placentas has been temporarily suspended.

Which placentas should be sent off for histology?

In accordance with the Royal College of Pathologists the placenta should be sent off for histology in all of the following cases:

- All stillbirths (antenatal or intrapartum)
- Late miscarriages (20 - 23+6 weeks)
- Neonatal deaths if access to the placenta is still possible

Consideration should also be given to sending the placenta for analysis in cases of severe fetal distress requiring admission to the NNU and fetal hydrops. These cases should be discussed on an individual basis with perinatal pathology department at Birmingham Women’s Hospital.

How should the specimens be sent?

Placentas can be submitted to the Laboratory either fresh or fixed in Formalin. Where there are likely to be delays in examination or it is not possible to refrigerate the specimen (at 4°C in a tightly sealed container) Formalin should be used. It may also be desirable to fix the placenta in potentially high-risk infective cases or where there is a risk of congenital infection being transmitted to a vulnerable member of staff.

If submitted in Formalin the container should be of sufficient size to minimise distortion of the placenta and the specimen should be completely covered in Formalin. If cytogenetics tests are to be performed Formalin should not be used and the placenta should be sent Fresh to the laboratory.

Please note that the key documents are not designed to be printed, but to be used on-line. This is to ensure that the correct and most up-to-date version is being used. If, in exceptional circumstances, you need to print a copy, please note that the information will only be valid for 24 hours and should be read in conjunction with the key document supporting information and/or Key Document intranet page, which will provide approval and review information.

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The specimen container must be labelled with the patient details and the referral form completed in full (Appendix 1).

Although parental consent is ideal it is not necessary and the placenta can be submitted for analysis without it.

If there are any doubts about whether the placenta should be sent off for assessment, or if you feel that it would be desirable and your case does not fit the criteria please contact the mortuary at Birmingham Women's Hospital to discuss your case in more detail on 01213358210.

References

Royal College of Pathologists. Tissue pathway for histopathological examination of the placenta. Oct 2019

Roberts DJ, Oliva E. Clinical significance of placental examination in perinatal medicine. J Matern Fetal Neonatal Med 2006;19:255–264

Lakshmi Thirumalaikumar FRCOG, Kalaivani Ramalingam FRCOG, Tamas Marton MD PhD. Placental histopathological abnormalities and poor perinatal outcomes. The Obstetrician & Gynaecologist, Vol 21, Issue 2. April 2019.

Contribution List

This key document has been circulated to the following individuals for consultation;

Designation
Nicola Robinson
Alex Blackwell
Swati Ghosh
Manon van Seters
Rina Panchal
Joanne Lee
Sam Agwu
Susie Smith
Jane Gordijn
Catherine Hillman
Anna Wittkop
Jane Wardlaw
Laura Veal
Jon Hughes
Caitlin Wilson
Jaime Greenwood

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Maternity Quality Governance Meeting

Appendix 1: Histopathology Placenta Examination Request Form



WEST MIDLANDS PERINATAL PATHOLOGY

CLINICAL INFORMATION FOR PLACENTAL EXAMINATION FOLLOWING PREGNANCY LOSS

Mother (sticker if available)
 Family Name:.....
 First Name:.....
 D.o.B.: / /
 Reg No.....

Fetus/Infant (sticker if available)
 Family Name:.....
 First Name:.....
 D.o.B.: / / D.o.D / /
 Reg No.....

Please carefully complete this form. Any missing information could potentially delay or alter the findings.

All Parts require completion for EVERY referral made.

REFERRING HOSPITAL: _____ Ward: _____

CONSULTANT OBSTETRICIAN: _____

Part 1. MOTHER'S DETAILS

(ALL fields for this section are MANDATORY for ALL requests please)

Ethnic origin: _____ Father's ethnic origin (if known) _____

Consanguinity between parents? Y/N

Maternal height: _____ cm; Booking weight: _____ kg BMI: _____

Blood Group: _____

Obstetric History:

	Date	Gestation	Delivery	Sex	Outcome
1					
2					
3					
4					
5					
6					
7					

Part 2. CURRENT PREGNANCY DETAILS

(ALL fields for this section are MANDATORY for ALL requests please)

Booked/Unbooked LMP : _____ EDD: _____

Gestation: by dates: _____/40 by scan: _____/40 weeks

Is there any relevant past medical history? (If yes, what?) _____

Were there any abnormal screening results? (If yes, what?) _____

Medications (if any): _____

USS findings (please send report if abnormal):

	Date	Dating/Anomaly/ Growth	Gestation	Findings
1				
2				
3				
4				

Antenatal diagnostic procedures eg. CVS or other invasive techniques/ fetal MRI (please include results if available/ known):

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Additional antenatal history:

Was this a twin pregnancy?	Y/N	If so, MCDA/ MCMA/ DCDA?
History of reduced fetal movements?	Y/N	If so, how many episodes for how long?
Was there antenatal bleeding?	Y/N	If so, when and how much?
Was there hypertension?	Y/N	Max BP = mmHg
Was there pre-eclampsia?	Y/N	Max BP = mmHg
Was there anaemia?	Y/N	

Anything else of relevance regarding the pregnancy that you would like to tell the pathologist?

Part 3: LABOUR & DELIVERY DETAILS

- 1) Was this a TOP? Y/N If Yes - Feticide Y/N If so, date of feticide:
- 2) Was this a miscarriage (i.e. pregnancy loss <24 weeks' gestation)? Y/N
- 3) Was this an antepartum IUD > 24 weeks' gestation? Y/N
- a) If Yes, when was the last documented evidence of fetal/ infant viability/ fetal heart beat?
- 4) Was this an intrapartum or neonatal death (i.e. fresh stillbirth/ live birth)? Y/N

If Yes:

- a) What was the presenting part? Vertex/ Breech/ Other
- b) Rupture of membranes: date _____ time _____ Augmentation (Syntocinon): yes/no
- c) 1st stage __h __min 2nd : __h __min
- d) Fetal distress: Y/N If yes, please specify signs: _____
- e) DELIVERY:

Spont. / Assisted (forceps / ventouse) / CS (elective/emergency). Date: _____ Time: _____

Did labour commence spontaneously/ did it require induction?

Date of induction, if applicable:

Liquor: Normal / reduced volume/ increased volume. Abnormal liquor colour?

Was there antepartum haemorrhage? Was there maternal pyrexia?

The Infant or fetus			Any abnormalities in the fetus/infant at delivery?:
Male ♂	Female ♀	Indeterminate	
Birth weight (g):			
Apgar Scores: 1'	5'	10'	

Please do not hesitate to contact us should you have any queries regarding the completion of this form.

Person completing form: _____

Contact number / bleep No _____ (Please PRINT)

Copy of report to be sent to:

Consultant Obstetrician: (Mr/ Ms/ Mrs/ Dr) _____

**THE PLACENTAS SHOULD BE SENT FRESH IN A LEAKPROOF, OPAQUE CONTAINER.
ALL SPECIMENS MUST BE CLEARLY LABELLED AND ACCOMPANIED WITH A COMPLETED REQUEST FORM**

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