Milton Keynes University Hospital NHS Foundation Trust

Guidance document

Submitting Placental Specimens to Cellular Pathology

Classification:	Guideline
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Authors Division:	Core Clinical
Departments/ Group this Document applies to:	Women's Health, Pathology, Maternity, Paediatrics
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Approval Group: Trust Documentation Committee, Women's Health CIG, Women's Health Guideline review group, Pathology CIG	**Last Review: 11/2018**

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Guideline to be followed by (target staff): Midwifery staff, obstetricians, paediatric and neonatal doctors, cellular pathology staff		
To be read in conjunction with the following documents: None		
CQC Fundamental standards: CQC Fundamental Standard which this guideline meets? Regulation 9 – person centred care Regulation 10 – dignity and respect Regulation 12 – Safe care and treatment Regulation 17 – Good governance Regulation 18 – Staffing Regulation 19 – Fit and proper		

Disclaimer – For clinical guidelines only

Since every patient's history is different, and even the most exhaustive sources of information cannot cover every possible eventuality, you should be aware that all information is provided in this document on the basis that the healthcare professionals responsible for patient care will retain full and sole responsibility for decisions relating to patient care; the document is intended to supplement, not substitute for, the expertise and judgment of physicians, pharmacists or other healthcare professionals and should not be taken as an indication of suitability of a particular treatment for a particular individual.

The ultimate responsibility for the use of the guideline, dosage of drugs and correct following of instructions as well as the interpretation of the published material **lies solely with you** as the medical practitioner.

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Guideline Statement

Macroscopic and histological examination of the placenta in certain conditions has an important role in helping in identifying pathological processes and aetiologies which may have contributed to or caused an adverse pregnancy outcome. It may be used to identify conditions known to have a risk of recurrence or which may be treatable or preventable and therefore improve the management of subsequent pregnancies. In addition to clinical relevance, it has implications for governance and perinatal and antenatal management audit and may serve to influence changes in clinical practice.

Executive Summary

The purpose of this document is to provide guidance to obstetric, midwifery and neonatal consultants to help decide which placental specimens should and should not be submitted for histological examination.

In this Trust, issuing of placental histology reports have been delayed over the years due to unprecedented workload pressures in Cellular Pathology. However, very rarely are delayed placental histology reports pursued by clinicians looking after the patient or the newborn. This suggests that the reports are not used to guide treatment of either the mother or the newborn in most cases. . This document provides guidance as to which placental specimens must be submitted for histological examination, which specimens it may be desirable to examine histologically, and which placental specimens should not be submitted for histological examination.

Definitions

Placenta

An organ which supports the developing fetus with nutritional requirements as well as maintaining the immunological and metabolic requirements of the fetus.

1.0 Roles and Responsibilities:

All midwifery staff, obstetricians and other staff involved in the intrapartum care of the patient have a responsibility to ensure they are conversant with the contents of this guideline. Also, all staff involved in subsequent neonatal care should also ensure that this guideline is followed. Any diversion from this guideline must be discussed with a Consultant in Cellular Pathology.

2.0 Implementation and dissemination of document

2.1 The Cellular Pathology lead in Gynaecological Pathology will disseminate this document to all relevant staff by Trust e-mail following final approval.

2.2 This document is accessible on the Trust intranet. Wherever possible staff should be encouraged to access this document via the intranet as this will ensure that the most up to date version is followed. Where it is felt that a separate copy must be held for local use the ward manager or departmental manager is responsible for ensuring a copy of any new or revised document is in the policies and procedural document file. On receipt of a new document the ward or departmental index must be updated and old versions destroyed.

2.3 The guideline will be implemented by midwifery and obstetric staff as well as those involved in delivery of neonatal care and those working in Cellular Pathology.

3.0 Processes and procedures

3.1 It is advised that placentas from the following pregnancies should be submitted for histological examination:

- All babies in unexpectedly poor condition with admission to NNU or transferred for tertiary care
- All stillbirths and neonatal deaths
- All miscarriages from 16 to 24 weeks
- All preterm deliveries from 24-32 weeks whether iatrogenic or not
- All abnormal babies WITHOUT a clear antenatal diagnosis
- All suspected abnormally invasive or morbidly adherent placentas (placenta accreta)
- All babies suspected of severe growth restriction (birthweight below 3rd centile)
- Monochorionic twins
- Fetal hydrops
- Maternal pyrexia (>38ºC)
- Placental abruption
- maternal coagulopathy
- maternal substance abuse.
- Suspected chorioamnionitis

3.2 Placentas from the following pregnancies may be submitted for histological examination at the discretion of the consultant obstetrician if deemed to be clinically appropriate and of benefit to the management of the woman or the baby:

- Prematurity (32-36+6 weeks)
- Fetal congenital malformation
- Rhesus (and other) isoimmunisation without admission to NNU

- Abnormal placental shape (if clinically relevant)
- 2 vessel cord, etc.
- Prolonged rupture of the membranes (more than 36 hours)
- Gestational diabetes
- Maternal group B streptococcus in current pregnancy
- Pre-eclampsia/maternal hypertension

3.3 The following are not normally indications for a request for placental histology as placental histology in such cases is unlikely to provide useful clinical information:

- Uncomplicated dichorionic twin pregnancy
- Abnormal baby where diagnosis clear
- Mildly small for gestational age with no NNU admission e.g. >3rd centile
- Cholestasis of pregnancy
- Pruritis of pregnancy
- Hepatitis B, HIV, etc.
- Other maternal disease with normal pregnancy outcome
- Placenta praevia
- Postpartum haemorrhage
- Polyhydramnios
- Normal pregnancy.

3.3.1 All placentas received under category 3.3 will be booked into WinPath and assigned a histology number. However, no macroscopic or microscopic examination will be undertaken on these placentas. A report will be issued to say that histological examination of the placenta is not indicated and that the wet specimen will be retained for a period of 6 weeks following authorisation of this report after which the placenta will be disposed of, unless further clinical information indicating necessity of placental examination or other mitigating circumstances necessitating examination is provided to the Cellular Pathology laboratory or the Cellular Pathology Office.

3.4 All placentas submitted without sufficient clinical details will be booked into WinPath and assigned a histology number. However, no macroscopic or microscopic examination will be undertaken on these placentas. A report will be issued to say that clinical details have not been provided to indicate a need for the histological examination of the placenta and that the wet specimen will be retained for a period of 6 weeks following authorisation of this report after which the placenta will be disposed of, unless relevant clinical information indicating necessity of placental examination or other mitigating circumstances necessitating examination is provided to the Cellular Pathology laboratory or the Cellular Pathology Office.

3.5 All placenta histology requests should be undertaken in e-care with the consultant obstetrician's name who will be able to review and, if necessary, act on any histology reports, including those reports where the placenta is to be kept without histological examination and disposed of after 6 weeks

3.6 Placental histology can always be requested for any case which is deemed to be clinically necessary following discussion between the responsible obstetric/neonatal consultant and the duty pathologist. The pathologists will always be happy to discuss such cases and come to an agreement.

4.0 Statement of evidence / references

Oxford Academic Health Science Network Maternity Network (2016) *Indications for request for placental histology.* [Oxford AHSN Maternity Network Guideline 16/8/16 v1]. [Online]. Available from: http://www.oxfordahsn.org/wp-content/uploads/2017/01/Placental-histology-Guideline-Oxford-AHSN-v1.pdf [Accessed 18 September 2018]

Royal College of Pathologists (2017) *Tissue pathway for histopathological examination of the placenta*. [G108]. [Online]. version 2, July 2017. Available from: https://www.rcpath.org/resourceLibrary/tissue-pathway-histopathological-placenta.html [Accessed 18 September 2018]

5.0 Governance

5.1 Document review history

Version number	Review date	Reviewed by	Changes made

5.2 Consultation History

Stakeholders Name/Board	Area of Expertise	Date Sent	Date Received	Comments	Endorsed Yes/No
Rebecca Potter	Senior Biomedical Scientist	June 2018	June 2018	Some concern expressed regarding ability of laboratory staff to triage specimens to appropriate category. Reassured that it will be duty pathologist who will triage the specimens	Yes
All obstetric consultants and midwifery staff including pharmacists and general manager	Obstetrics	Sept 2018		Comments as received under the named staff	
Julie Cooper	Head of Midwifery and Paediatric Nursing	Sept 2018	Sept 2018	Not clear in paragraph 3.3.1, what category of placentas being referred to. Also whether this should be referred to as a guideline rather than a policy. Also further comments at Guideline Review Group meeting 31 Oct 2018 about returning placentas without consultant names.	Yes. Appropriate changes made to paragraph 3.3.1. Changed from policy to guideline. 3.5 changed as since guideline first drafted, e-care has come into use. Therefore changed to state all requests for placenta histology should be made through e-care.
Lydia Stratton-Fry	Maternity Matron	10 Sept 2018	Oct 2018	Trigger list currently in use states reasons to send the placenta that are not in this guideline and include, severe pre-eclampsia, Clinical chorioamnionitis, recurrent antepartum haemorrhage, Apgar's less than 5 at 5 minutes, this guideline states monochromic twins but our trigger list	Yes

				includes all multiple pregnancies	
Diane Summersgill	Midwife	12 Sept 2018	Oct 2018	No comments	N/A
Jessica Matson	Midwife	10 Sept 2018	Oct 2018	No comments	N/A
Michelle Dunne	Midwife	10 Sept 2018	Oct 2018	No comments	N/A
Ed Neale	Divisional Director, Women's Health	12 Sept 2018	Oct 2018	No comments	N/A
Linda Potter	Librarian	18 Sept 2018	Sept 2018	Full references provided .	Yes, section 4.0 altered accordingly.
Laura Jewell	Midwife	18 Sept 2018	Oct 2018	No comments	N/A
Laura Andrews	Midwife	20 Sept 2018	Oct 2018	No comments	N/A
Kailash Nakade	Consultant Obstetrician	18 Sept 2018	Oct 2018	No comments	N/A
All neonatal consultants and neonatal lead nurse	Paediatrics/neonatal	Oct 2018		Comments as received under the named staff	
Dr Indranil Misra	Consultant Paediatrician	Oct 2018	Oct 2018	No comment	N/A
Dr Zuzannah Gawlowski	Consultant Paediatrician	Oct 2018	Oct 2018	Not clear under 3.2 if referring to current or previous group B strep infection.	Yes, changed to *current* group B strep infection.
Karen Rice	Neonatal Lead Nurse	9 Oct 2018	Oct 2018	Neonatal consultant makes the decision If he/she wants the placenta examined, not the neonatal staff which to me implies nursing staff.	Yes

5.3 Audit and monitoring

Audit/Monitoring Criteria	Tool	Audit Lead	Frequency of Audit	Responsible Committee/Board
Monitor and audit numbers of placentas returned or kept without being blocked.	WinPath data, laboratory data	Gynae histology lead	After first year of implementation of this guideline, then every 2-3 years	

5.4 Equality Impact Assessment

As part of its development, this guideline and its impact on equality has been reviewed. The purpose of the assessment is to minimise and if possible remove any disproportionate impact on the grounds of race, gender, disability, age, sexual orientation, religion or belief, pregnancy and maternity, gender reassignment or marriage and civil partnership. No detriment was identified.

Equality Impact Assessment			
Division	**Core Clinical**	**Department**	**Pathology**
Person completing the EqIA	**Laila Hatsell**	**Contact No.**	
Others involved:		**Date of assessment:**	
Existing guideline/service		**New guideline/service**	

Will patients, carers, the public or staff be affected by the guideline/service?	Staff
If staff, how many/which groups will be effected?	All staff

Protected characteristic	Any impact?	Comments
Age	NO	
Disability	NO	
Gender reassignment	NO	
Marriage and civil partnership	NO	
Pregnancy and maternity	NO	
Race	NO	
Religion or belief	NO	
Sex	NO	
Sexual orientation	NO	

What consultation method(s) have you carried out?	
How are the changes/amendments to the policies/services communicated?	