

# Placenta Examination and Histological investigation of Placenta Following Birth Guideline

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Brief Summary of Document:	The aim of this guideline is to provide all clinical staff working within Maternity Services clear guidance on universal disposal of placenta and identification and management of placentas that should be sent for histopathological examination.
Scope	The scope of this standard operating procedure is equally applicable to all staff responsible for providing maternity care in Hywel Dda
To be read in conjunction with:	Standard Infection Prevention 149 - <a href="#">Hand Hygiene Policy</a> Mandatory training policy for Maternity Services
Patient Information:	<b>Include links to <a href="#">Patient Information Library</a></b>

Owning group	Maternity WCD Group
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Executive lead	Mandy Rayani
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## Reviews and updates

Version no:	Summary of Amendments:	Date Approved:
1	New guideline	26/3/2021

## Glossary of terms

Term	Definition

Keywords	Birth Placenta Examination and Histological investigation
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## 1. Aim

The aim of this guideline is to provide all clinical staff working within Maternity Services clear guidance on universal disposal of placenta and identification and management of placentas that should be sent for histopathological examination.

## 2. Objective

This objective of this guideline is to provide guidance on the universal disposal of placentae as well as range of indications for referral of a placenta for histopathological examination. The standard operating procedure applies equally to single or multiple gestation that require histological investigation.

Placental histology might

- Facilitate the diagnosis of maternal-fetal conditions associated with adverse outcomes.
- Provide information salient to or allow prognosis for future pregnancies and their outcomes.

## 3. Scope

The scope of this guideline is equally applicable to all staff responsible for providing maternity care in Hywel Dda.

## 4. Introduction

In the majority of cases women will request that the midwife dispose of the placenta appropriately. However in some situations evidence suggest that lesions of the placenta often reflect or explain the condition in which the baby was born and some have clinicopathological implications. However, in most cases, there is no clinicopathological relevance to a placental examination. The benefits that can be expected from the examination include revealing the aetiology of stillbirth, preterm delivery, severe intrauterine growth restriction (IUGR), and neurodevelopmental impairment. It may be possible to decide whether the pathological condition that endangered the wellbeing of the fetus was an acute or a chronic process.

Conditions with the risk of recurrence can be recognised, resulting in adequate treatment and preventive measures during subsequent pregnancies. Placental examination may have medico legal aspects—for example, concerning the aetiology of long term neurodevelopmental sequelae or the approximate timing of an intrauterine death. Individual judgment is warranted concerning the appropriateness of submitting the placenta. The decision to submit the placenta to histopathological examination should be based upon a reasonable likelihood that such an examination will:

- Facilitate the diagnosis of maternal-fetal conditions associated with adverse outcomes;
- Provide information salient to or allow prognosis for future pregnancies and their outcomes

## 5. Universal disposal of the placenta

**All placentae, regardless of mode of delivery, should be appropriately labelled and stored on the labour ward for a period of 24 hours. Only after this time should arrangements be made for the appropriate disposal of the placenta in line with the health board policy**

The majority of women will want the midwife to dispose of the placenta which should be done in accord with the health board policy. The placenta should be placed in a placenta container inside a placenta bag. The placenta bag should be labelled with the date and time of birth as well the room number / theatre where the delivery took place. The placenta containers should be stored on the labour ward. At a home confinement, place the placenta into the orange clinical waste bag and place into a placenta pot.

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If the woman wishes to take her placenta home to bury or encapsulate, instructions for safe disposal should be given and the woman should bring a suitable container for transferring the placenta.

There are occasions where the placenta may need to be sent for histological investigation. This may be due to a poor outcome or to aid in treatment for the neonate (see below)

### 6. Indications to send a placenta for histological investigation

- Severe fetal growth restriction (<3<sup>rd</sup> centile)
- Fetal abnormality-chromosomal or structural
- Unexpected term admission to SCBU (where the underlying condition is likely to be related to infection / birth hypoxia)
- Rhesus isoimmunisation
- Morbidly adherent placenta with incomplete removal or major obstetric haemorrhage during removal of the placenta
- Maternal alcohol and substance abuse
- Extreme prematurity(<26 weeks)
- Late miscarriages
- Twins when there is a significant growth discordance
- Maternal infection requiring antibiotics for suspected chorioamnionitis
- Stillbirth (N.B if the parents consent to a post-mortem examination the placenta should be sent for full investigation with the baby to University Hospital Wales (UHW))
- A baby born with low Apgars requiring resuscitation / abnormal blood gases

Please note that placenta's should be retained from a home or MLU birth for any of the above indications.

**Submission of placentas following other pregnancy complications may depend on the value placed on placental examination in other situations by the senior obstetricians or paediatricians.**

### 7. How to send the placenta for histological investigation

Full details of the patient (mother), clinical consultant and date of delivery should be provided on the request form. As a minimum, the gestational age, birth weight and the indication for referral should be stated. Details of previous pregnancy complications and relevant maternal disease should also be provided.

The specimen container must be labelled with the patient details (on both the lid, and specimen container).

Placenta's for histological investigation should be sent in an appropriate sized white specimen pot available on labour ward..

Placentas may be submitted to the laboratory in normal saline. When fixated in normal saline, the container should be of sufficient size to minimise distortion of the specimen and normal saline should be of adequate volume to cover the specimen entirely to ensure proper fixation.

### 8. How to fill the specimen request form (this is the responsibility of the requesting clinician):

- Ensure full details are recorded on the pathology request form:
- Mothers full name and hospital number

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- Clinical consultant
  - Date of delivery
  - Gestational age and mode of delivery
  - Live birth or still birth
  - Baby weight and sex
  - Apgar scores
  - Criteria indicating the need for request
  - Ensure the specimen container is the correct size to adequately allow for immersion in normal saline.
  - Take samples for microbiology/cytogenetics prior to immersion in normal saline
  - Label the container with the mother's name and number
  - Send the placenta, covered in normal saline, with the histology form to the laboratory
- Document in maternal and neonatal records.

## 9. Documentation

It is expected that every episode of care to be clearly documented and as contemporaneously as possible using the approved Hywel Dda labour and birth / postnatal record. This is in line with standards set by governing professional colleges (NMC, RCOG). All entries must have date and time together with signature and printed name.

## 10. Auditable Standards

- Completeness of adherence to referral criteria
- Completeness of recording of standard measurements
- Inclusion of clinicopathological comment in report
- Turnaround time for report

## 11. References

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2. Carter, R. C., Wainwright, H., Molteno, C. D., Georgieff, M. K., Dodge, N. C., Warton, F., Meintjes, E. M., Jacobson, J. L. and Jacobson, S. W. (2016), Alcohol, Methamphetamine, and Marijuana Exposure Have Distinct Effects on the Human Placenta. *Alcohol Clin Exp Res*, 40: 753–764. doi:10.1111/acer.13022
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