



**OBSTETRICS AND GYNAECOLOGY
CLINICAL PRACTICE GUIDELINE**

Labour: Indications for placental examination in pathology

Scope (Staff):	WNHS Obstetrics and Gynaecology Directorate staff
Scope (Area):	Obstetrics and Gynaecology Directorate clinical areas at KEMH

This document should be read in conjunction with the [Disclaimer](#).

Specimen transport

1. The placenta should be checked; double bagged (plastic), labelled and placed in a plastic container.
2. Ensure a patient addressograph and date is applied on the:
 - outer plastic bag containing the placenta,
 - the container lid
 - the side of the container
3. The placenta is either sent immediately or placed in the refrigerator in the utility room with the completed paperwork until transfer to Specimen Reception.
 - In cases of perinatal death when post-mortem is **required** the placenta is taken by the Patient Care Assistant to Perinatal Pathology at KEMH. The labelled placenta is placed in the refrigerator in the LBS Perinatal Loss room. In cases when an autopsy is **declined**, a Pathology form must be completed and sent with the placenta.

Pathology request form- information required

Information provided on the pathology request form should include:

- Consultant's name legibly written on the form
- Provider number
- Parity
- Gestation
- Pregnancy history
- Intrapartum concerns/abnormalities
- Neonatal: Any abnormalities



- Therapeutic interventions
- Both histopathological and microbiological examination must be requested

Placentas for routine histological examination:

- IUGR (3rd centile)
- Prematurity (< 32 weeks)¹
- Severe fetal distress or poor condition at birth (scalp lactate >4.5, cord pH <7.2, Apgar ≤ 7 at 5min). These variables MUST be clearly stated on the request form.
- Known or suspected syphilis in pregnancy
- No or minimal Antenatal Care
- Stillbirth¹
- Late miscarriage¹ (14 weeks and over)
- Fetal Hydrops¹
- Twin to twin weight discordance > 20%, (Twins where chorionicity has been questioned by the clinical team)
- Rhesus (and other) isoimmunisation
- Fetal abnormality
- Neonatal death
- Placental Abruption
- Pre-eclampsia², pregnancy induced hypertension; chronic hypertension
- Maternal infection² or peripartum sepsis
- Significant maternal disease or conditions
- Drug² or alcohol misuse
- Unexplained or recurrent pregnancy problems e.g. stillbirth, early pregnancy loss, preterm birth
- Metastatic malignancy
- Medical request

Report available within 7 working days from the receipt of the placenta.

Placentas for macroscopic examination and storage:

Macroscopic examination includes measurements and weights.

Storage includes small sections of membranes, cord and placenta tissue being taken and placed in wax blocks and placed on permanent record. Histological slides can be prepared from these as requested.

Where microscopy, culture and sensitivity (MC&S) has been requested on the form, a small sample will be forwarded to microbiology who will issue a report.

A Pathologist may, based on the clinical history, decide that routine microscopic examination should proceed.

References and resources

1. Evans C, Cox P. Tissue pathway for histopathological examination of the placenta: The Royal College of Pathologists. 2019. Available from: <https://www.rcpath.org/uploads/assets/ec614dfa-007c-4a93-8173cb202a071a72/G108-Tissue-pathway-for-histopathological-examination-of-the-placenta.pdf>
2. Zhou Y, Ravishankar S, Luo G, Redline R. Predictors of high grade and other clinically significant placental findings by indication for submission in singleton placentas from term births. **Pediatric and Developmental Pathology**. 2020;23(4):274-84.

Related WNHS policies, procedures and guidelines

WNHS Policy [Consent for Under 20 Week Fetal Autopsy Examinations](#)

WNHS Clinical Guidelines, Obstetrics and Gynaecology:

- [Perinatal Loss](#): Legalities and reporting; Perinatal Loss in the third trimester Management
- [Placenta Being Taken Home: Safe Handling](#)
- Labour (Third Stage) [Retained Placenta](#)

[PathWest Test Directory](#)

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Version history

Date	Summary
Jan 1998	First version
Prior to Jul 2019	Archived- contact OGD Guideline Coordinator for previous versions. Original titled as B.5.14.2: 'Indications for Pathological Examination of the Placenta'
Jul 2019	<ul style="list-style-type: none"> • Consultant's details to be legibly written on the request form • Updated placenta storage location
Nov 2020	<ul style="list-style-type: none"> • Include provider number on request forms

	<ul style="list-style-type: none"> • Updated lists which are now divided into two types of examination- 'Placentas for routine histological examination' and 'Placentas for macroscopic examination and storage'- read updated lists in guideline. Added new category for 'At the time of macroscopic cut-up' • Macroscopic storage- <ul style="list-style-type: none"> ➤ Macroscopic examination includes measurements and weights ➤ Storage includes small sections of membranes, cord and placenta tissue being taken and placed in wax block and placed on permanent record. Histological slides can be prepared from these as requested. ➤ Where microscopy, culture and sensitivity (MC&S) has been requested on the form, a small sample will be forwarded to microbiology who will issue a report. ➤ A Pathologist may, based on the clinical history, decide that routine microscopic examination should proceed.
Apr 2021	<ul style="list-style-type: none"> • Removed details for placentas not sent for examination. See related guideline 'Labour: Placenta Being Taken Home: Safe Handling'
Sept 2024	<ul style="list-style-type: none"> • Added that placenta is either sent immediately to Pathology or stored in the refrigerator in the utility room • Reformatted list for routine histological examination

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