

HISTOLOGICAL EXAMINATION OF THE PLACENTA

PHYSICAL EXAMINATION OF THE PLACENTA

All placenta and cord should be examined in the birthing room by the midwife who performed the birth and a record made of the findings.

The following findings should be documented in the clinical notes:

- Placental weight (if applicable)
- Completeness of placental disc and membranes
- Number of cord vessels
- Gross abnormalities

INDICATIONS FOR HISTOLOGICAL EXAMINATION OF THE PLACENTA

Maternal consent must be obtained and documented on placental tracking consent form (Ref.8993).

MATERNAL INDICATIONS

1. Systemic disorders with clinical concerns for mother or infant
 - Significant/active autoimmune disease
 - Diabetes – poorly controlled with IUGR/macrosomia
 - Other significant maternal disease affecting pregnancy
2. Moderate/Severe pre-eclampsia < 34 weeks gestation with/without IUGR
3. Hypertension – severe with/without IUGR
4. Placental abruption/APH
5. Sepsis
6. Severe maternal trauma, eg. MVA
7. Amniotic fluid abnormalities
 - Severe oligohydramnios
 - Severe unexplained polyhydramnios
8. Malignancy

FETAL/NEONATAL INDICATIONS

1. Stillbirth/Neonatal death
2. Preterm birth < 28 weeks gestation
3. Compromised condition at birth
 - cord blood pH < 7.0
 - Apgar < 6 at 5 mins
 - Ventilatory assistance >10mins
 - Severe anaemia haematocrit < 35%
 - Admitted to neonatal unit
4. IUGR/birth weight < 3rd centile
5. Neonatal infection or sepsis
6. Neonatal seizures
7. Hydrops fetalis
8. Amniotic band disruption sequence
9. Twins if discordant growth or any of the above, or undetermined chorionicity

PLACENTAL INDICATIONS

1. Physical abnormality (eg. infarct, mass, vascular thrombosis, haemorrhage, malodorous, scar)
2. Small/large for weight of baby
3. Umbilical cord abnormalities (eg. thrombosis, torsion, torn fetal vessel)

HISTOLOGICAL EXAMINATION OF THE PLACENT IS NOT REQUIRED IN THE FOLLOWING CIRCUMSTANCES UNLESS ONE OF THE GIVEN INDICATIONS LISTED ABOVE IS ALSO PRESENT

MATERNAL

- Elective termination of pregnancy (unless for maternal condition)
- Preterm delivery 34-37 weeks
- History of substance abuse or toxin exposure
- Gestation > 42 weeks
- Prolonged (> 24hrs) rupture of membranes
- Placenta praevia
- Well controlled gestational diabetes without fetal complication
- Meconium

FETAL

- Abnormal karyotype if already confirmed
- Multiple gestation without other indication
- Delivery by caesarean section
- Structural abnormality with known chromosomal diagnosis
- Babies of mothers with gestational diabetes admitted to NNU for glycaemic control

PLACENTAL

- Cord lesions, true knot, single artery, if normal neonatal outcome
- Marginal or velamentous cord insertion if normal neonatal outcome
- Nuchal cord if normal neonatal outcome

CONDITION OF THE PLACENTA POST PATHOLOGY

If a woman requests for the placenta to be returned to her, advise that the placenta will have been immersed in formalin and may irritate skin, eyes, or lungs and have an unpleasant smell. The placenta is returned in a sealed container, and as much of the formalin as possible washed off. However, there will still be some residual formalin in the specimen.

It is advised not to open the container unless this is done in a very well-ventilated space and, if handled, use protective gloves. If the placenta is to be buried, it is best removed from the container very close to the time of burial.

ASSOCIATED DOCUMENTS

- Placenta to histology consent and return form
- Placenta tracking process
- Fetal Loss Package (Ref.9567)

AUDIT STANDARDS

Collection of data for audit may include:

- Placenta's sent for histological examination meet indications criteria
- Placenta tracking form (Ref.8993) completed and appropriate follow up of placentas to be returned to women

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Histological Examination of the Placenta

Maternity Guidelines

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