



9 SPECIMEN COLLECTION AND PREPARATION

9.4 Products of Conception for Cytogenetic Studies

Chromosome abnormalities are found in >50% of spontaneous miscarriages occurring in the first trimester of pregnancy. Cytogenetic analysis of tissue obtained from products of conception is useful in investigating the cause of recurrent miscarriage/IUFD and in the identification of chromosome abnormalities which may potentially pose problems in future pregnancy attempts.

Do not send whole foetus or placenta, only send biopsies.

- **Placental biopsy:**
 - always send for analysis
 - take from fetal side of placenta (follow cord to insertion)
 - take from centre of placenta (not edge)
 - ~1cm³ size
- **Skin biopsy:**
 - always send if possible, conditional on parental consent
 - take from back of thigh
 - ~5mm² for 16/40 or older; minimum size for < 16/40 is 2mm²
 - The person who took the sample should be documented on all relevant paperwork
- **Collection:**
 - please do not expect the Pathologist to take the samples at PM
 - use different scissors and forceps for skin and placenta
 - use separate universals containing sterile saline
 - label universals with patient details and tissue type
- **Transport:**
 - Without delay store the tissue at 4°C
 - There is no requirement to inform us in advance by telephone

Paperwork:

- use a single Cytogenetics request form and bag
- do **not** send the cytogenetic consent form or any other paperwork
- write legibly please
- give full details:
 - consultant
 - referral reason
 - gestation
 - foetal abnormalities (TOP for multiple abnormalities is insufficient if a PM is/is not performed)
 - information – specify what they are)



Tissue should be sent as described above to the Histology laboratory who will forward this **directly** to:

Cytogenetics Laboratory
Centre for Life
Newcastle-upon-Tyne.