
Perinatal Mortality Guideline 4

CLINICAL EXAMINATION OF THE PLACENTA

The following placentas should be sent to pathology for examination:

- A. All Stillbirths
- B. All infants compromised at birth. For the purpose of this guideline, a compromised infant is defined as any infant who does not remain with his/her mother postpartum, for the purpose of receiving special care.

In all cases of fetal death/stillbirth, the placenta should be examined by a pathologist in the laboratory. The placenta should be sent to the laboratory with the fetus, because the best results are obtained when the fetus and placenta are examined together. In the event that autopsy examination of the fetus has been declined, the placenta is then processed separately.

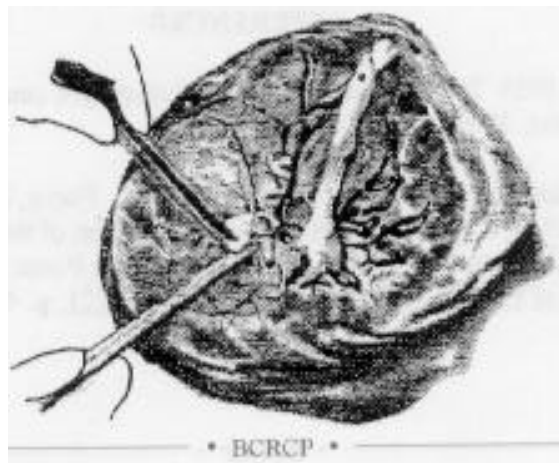
Most placental special studies require fresh placental tissue, including cultures for viruses and bacteria, cytogenetic and metabolic studies, electron microscopy, DNA studies, and vessel injection studies in multiple pregnancy. Therefore, where at all possible, placentas should be sent to the pathologist **fresh and unfixated**, unless alternative procedures have been agreed to after prior consultation.

Placental Sampling for Cytogenetic Studies (See Guideline 5, Appendix 4)

Following delivery of the placenta and **prior** to sending the placenta to pathology, a sample of placenta tissue should be collected on all stillbirths and stored until the clinician or pathologist decides if the specimen will be sent for cytogenetic studies.

To Collect:

Collect the placenta tissue sample from the fetal side by the site of cord insertion beneath the amnion as illustrated below. Remove 1 cm³ of placenta tissue with a sterile surgical knife and dissecting forceps. The sample should be placed in sterile saline or other appropriate tissue culture media, sealed, and labeled. Ensure that the media container is completely filled as the sample may stick to the lid of the container in transport.



Clinical Examination of the Placenta

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The Placental Pathology Practice Guideline Development Task Force of the College of American Pathologists has published a Practice Guideline for Examination of the Placenta (Arch Path Lab Med. 1997, p.473). The paper included the following Triage Worksheet as a method of recording these initial findings (see below).

Triage Examination of Placenta					
(circle correct response)					
Accession no.:	_____		Name: _____		
	Normal			Abnormal	
	_____			_____	
Cord Insertion:	Eccentric	Central	Marginal	Velamentous	Other: _____
Number of cord vessels:	3		2	>3	
Total cord length:	_____cm		<32 cm	>100 cm	
Disc weight for gestational age:	Normal		Small	Large	
Dimensions:	___ x ___ x ___ cm				
Maternal surface:	Intact		Incomplete	Other: _____	
Fetal membranes:	Normal		Cloudy	Other: _____	
Other placental indications for exam:	None:		Specify: _____		
Maternal indications for exam:	None:		Specify: _____		
Fetal/neonatal indications for exam:	None:		Specify: _____		

REFERENCES

Baldwin, V. (1995) The Placenta – What the Pathologist can Tell the Accoucheur. Journal SOGC December, 1995; p. 1198-1202.

Langston, C., Kaplan, C., Macpherson, T., Mancini, E., Peevy, K., Clark, B., Murtagh, C., Cox, S., Glenn, G. (1997). Practice Guideline for Examination of the Placenta: Developed by the Placental Pathology Practice Guideline Development Task Force of the College of American Pathologists. Archives of Pathological Laboratory Medicine 121: p. 449-476