

TEST: Chromosome analysis, products of conception (fetal and/or placental tissue)

DESCRIPTION: In situ culture of products of conception to produce metaphase cells for Giemsa-banded chromosome analysis. Cytogenetic examination includes detailed analysis of 5 cells and 20 cells total counted from approximately 15 colonies in 2 or more different cultures. A karyogram is prepared on at least 3 cells.

INDICATIONS:

- fetal demise
- miscarriage
- fetal malformations
- intrauterine growth retardation

Cultured fetal and/or placental cells can also be used for other tests such as biochemical or molecular analyses as indicated by the clinical situation.

SPECIMEN REQUIREMENTS:  $\geq 1 \text{ cm}^3$  fetal thigh muscle and skin and  $\geq 1 \text{ cm}^3$  placental tissue (chorionic villi). For macerated second and third trimester stillborns it is **very important to submit fresh placental tissue** since fetal tissue after fetal demise at this gestational age usually does not produce mitotic cells which are necessary for cytogenetic examination. Collect tissue in sterile manner and place in sterile tissue culture transport medium or sterile normal saline. Label tube or container with patient's name and medical record number. May be refrigerated overnight. **Specimen must not be frozen. Specimen must not be fixed in formalin.** Send to CompGene with a Requisition for Chromosome Analysis form as soon as possible after tissue collection.

REFERENCE VALUE: 46,XX or 46,XY

TURN AROUND TIME: 10-14 days

CPT CODES: 88233 - tissue culture for products of conception  
88262 - chromosome analysis, products of conception or stillbirth  
88291 - cytogenetic interpretation and report