

Name _____ Period _____ Date _____

Medicine Plus Karyotyping

1. What is a Karyotyping test?
2. What can the karyotype test determine?
3. What types of tissues can be used to perform the test?
4. Why is the test usually done?
5. What are normal results?
6. What are some of the genetic syndromes that can be found?

Other Questions

7. What does the word metacentric mean in terms of chromosomes?
8. What does the term submetacentric mean in terms of chromosomes?
9. What does the term acrocentric mean in terms of Chromosomes?
10. Summarize the basics of the genetic condition found. (i.e. – How does it present itself in the affected person? What is the life expectancy? What is the quality of life?)

Cytogenetics Report for G-Banded Karyotype

Select a chromosome from the cryostorage area. Sketch the chromosome, labeling the p arm, q arm, centromere, and telomere.

Chromosome type: _____ metacentric _____ submetacentric _____ acrocentric

Patient Name	Case Study ID	Age
Why is the patient being referred for karyotyping?	Source of Cells for Karyotyping ____ Blood ____ Amniocytes ____ Chorionic Villi ____ Other (specify) _____	
Total Number of Chromosomes Observed	Gender	
Chromosomal Findings ____ no observable chromosomal abnormalities ____ monosomy (chromosome # _____) ____ trisomy (chromosome # _____) ____ deletion (chromosome # _____, arm _____) ____ insertion (chromosome # _____, arm _____) ____ translocation (chromosome #s _____ and _____) ____ inversion (chromosome # _____, arm(s) _____)	Patient Diagnosis	
(Optional) On a separate sheet of paper, attach notes for patient's caregiver with additional implications of the diagnosis, including life expectancy, complications, available treatments, and support group information.		
Briefly explain how a karyotype is prepared.		
Why do you think that relatively few fetuses with chromosomal trisomies survive to birth?		
Why are microdeletions and microinsertions difficult to diagnose using karyotyping?		