

CMA FREQUENTLY ASKED QUESTIONS

The Medical Genetics Laboratories at Baylor College of Medicine is now offering Chromosomal Microarray Analysis (CMA) which is a new method of chromosomal analysis. Below are some frequently asked questions.

What is CMA?

CMA is a new method of analyzing chromosomes for a large number of genetic disorders. With a single test, CMA can detect genetic abnormalities on all chromosomes simultaneously. CMA has much higher sensitivity than the older chromosome test called karyotype.

What does the CMA test for?

CMA can detect genomic errors for each of the disorders that are usually identified by karyotype analysis, including Down syndrome, trisomy 13, trisomy 18, sex chromosomal abnormalities, and other rare genetic disorders reported to be associated with mental retardation and/or physical problems.

What are the benefits of the test?

CMA is more sensitive than older methods of chromosomal analysis, and is able to detect abnormalities that would not have been identified by karyotype analysis. If an abnormality is found, the results may provide important information that could help guide the medical decisions.

What is needed to perform a CMA test?

A small sample of blood (10cc for an adult and 4cc for a child) is the specimen most commonly submitted for analysis. Blood from both parents may also be requested. CMA can also be performed from tissue samples (placenta, cord, products of conception, and skin biopsies). Amniotic fluid or a chorionic villus sample (CVS) are used in the prenatal setting.

How long will the results take?

CMA results are provided to the physician in approximately 5-10 days. Occasionally the results may take longer.

How much does the test cost? Will insurance pay for the test?

For information on cost, please contact the Financial Office. Insurance is filed as a courtesy when a Patient Insurance Verification Form is submitted. Insurance coverage is determined by the insurance company and depends on individual policy limitations and medical indications.

What are the limitations of the test?

CMA is a new and sensitive test. It is possible that the test will detect a genetic abnormality for which there is currently very little medical information available to predict the type of clinical problems that may develop in an individual. While the test is very accurate, not every genomic abnormality (genetic defect) can be detected by a test. For some conditions, genomic gains or losses at a particular locus may represent only a certain percentage of the genetic changes associated with that given disorder. For instance, in some disorders, 99% of the cases may be detected by the test, while for others the detection rate may be 70% or less.

Can CMA be used for miscarriages or intrauterine fetal demise?

CMA can be done in these circumstances on any tissue (placenta, products of conception, umbilical cord, skin biopsy) that would be sent for karyotype testing. A cell culture, which is required for karyotyping, is often difficult to grow from these types of samples. Therefore, CMA may be successful when karyotype analysis fails.

How do I learn more about the CMA test?

If additional information is desired about this test, talk to your physician or genetic counselor. More information about CMA may also be obtained by calling Baylor Genetics at 1-800-411-GENE or by contacting us through the website: www.bcmgeneticlabs.org

