

Chromosomal microarray (CMA) is a type of <u>chromosome</u> test that can be done during pregnancy along with an <u>amniocentesis</u> or <u>chorionic villus sampling (CVS)</u>, or can be done for patients who are suspected of having an underlying genetic syndrome.

CMA can detect if there are small bits of missing (<u>deletion</u>) or extra (duplication) chromosome material that are too small to be detected by <u>traditional chromosome analysis</u> (<u>karyotype</u>). Extra (trisomy) or missing (monosomy) chromosomes can still be detected with CMA, but it may not be able to find chromosome translocations (when two pieces of chromosome break off and switch spots) or inversions (when a piece of chromosome breaks off and turns upside down).

There are over 150 genetic conditions that are caused by chromosome deletions and duplications that may be found with CMA. These conditions, called <u>microdeletion</u> and microduplication syndromes, are often associated with intellectual disability and birth defects, but can vary significantly when it comes to severity.

See our <u>Genetic Testing Results</u> page to learn about the types of results that a chromosomal microarray can have.

## **Related Articles**

• Chorionic Villus Sampling (CVS)

Chorionic villus sampling, or CVS, is a procedure that can be done during the first trimester of pregnancy (usually between 11 and 14 weeks). CVS involves getting some of the tissue from the placenta (the chorionic villi) so that the lab can test for chromosome and genetic conditions. Because CVS...

• Amniocentesis

Amniocentesis is a procedure that can be done during the second trimester of pregnancy (usually between 15 and 22 weeks). Amniocentesis involves getting some of the fluid from around the baby so that the lab can test for chromosome and genetic conditions. Because amniocentesis is an invasive procedure, there is...

• FISH Test

FISH, or fluorescence in situ hybridization, is a test that can be done on the cells from a chorionic villus sampling (CVS) or amniocentesis procedure. FISH can provide rapid results (usually within 48 to 72 hours) for limited chromosome conditions. Most labs offer FISH testing on CVS or amniocentesis cells...

<u>Chromosome Analysis</u>

A chromosome analysis, or karyotype, is the traditional testing that has been done on



cells from chorionic villus sampling (CVS) and amniocentesis procedures. A karyotype involves the lab examining the cells and determining the number of chromosomes. How the lab determines the number of chromosomes is a lengthy and complicated...