Karyotype Test

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Test Overview

Karyotype is a test to identify and evaluate the size, shape, and number of chromosomes in a sample of body cells. Extra, missing, or abnormal positions of chromosome pieces can cause problems with a person's growth, development, and body functions.

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Why It Is Done

Karyotype is done to:

- Determine whether the chromosomes of an adult have an abnormality that can be passed on to a child.
- Determine whether a chromosome defect is preventing a woman from becoming pregnant or causing miscarriages.
- Determine whether a chromosome defect is present in a fetus. Karyotyping also may be done to determine whether chromosomal problems may have caused a fetus to be stillborn.
- Determine the cause of a baby's birth defects or disability.

- Help determine the appropriate treatment for some types of cancer.
- Identify the sex of a person by determining the presence of the Y chromosome. This may be done when a newborn's sex is not clear.

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How to Prepare

As such no special preparation is required for this test

A genetic counselor or a specialized doctor can help you make well-informed decisions. Ask to have genetic counseling before making a decision about a genetic test.

How It Is Done

Karyotype testing can be done using almost any cell or tissue from the body. A karyotype test usually is done on a blood sample taken from a vein. For testing during pregnancy, it may also be done on a sample of amniotic fluid or the placenta.

Blood sample from a vein

The health professional drawing your blood will:

- Wrap an elastic band around your upper arm to stop the flow of blood. This makes the veins below the band larger so it is easier to put a needle into the vein.
- Clean the needle site with alcohol.
- Put the needle into the vein. More than one needle stick may be needed.
- Attach a tube to the needle to fill it with blood.
- Remove the band from your arm when enough blood is collected.
- Apply a gauze pad or cotton ball over the needle site as the needle is removed.
- Apply pressure to the site and then a bandage.

Cell sample from a fetus

For this type of test, cells are collected from the fetus using amniocentesis or chorionic villus sampling. For more information about amniocentesis, see the medical test Amniocentesis or Chorionic Villus Sampling.

Cell sample from bone marrow

Bone marrow aspiration may be used for a karyotype test. For more information about how this test is done, see the medical test Bone Marrow Aspiration and Biopsy.

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Results

Karyotype is a test to identify and evaluate the size, shape, and number of chromosomes in a sample of body cells.

Results of a karyotype test are usually available within 1 to 2 weeks.

Karyotype	
Normal:	• There are 46 chromosomes that can be grouped as 22 matching pairs and 1 pair of sex chromosomes (XX for a female and XY for a male). • The size, shape, and structure are normal for each chromosome.
Abnormal:	• There are more than or less than 46 chromosomes. • The shape or size of one or more chromosomes is abnormal. • A chromosome pair may be broken or incorrectly separated.
	• For details please refer report.

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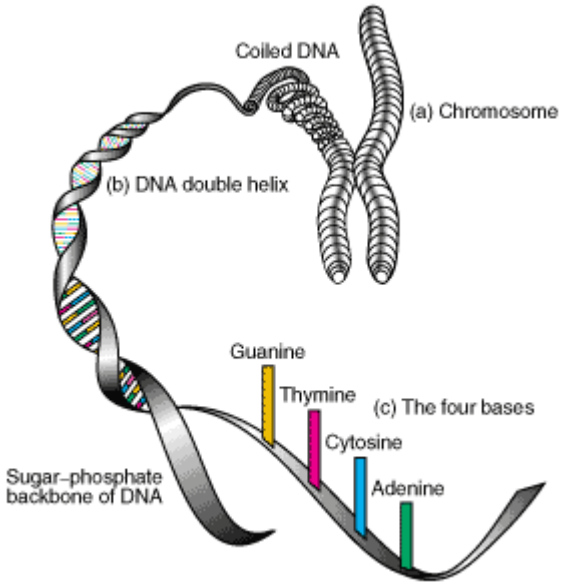
What Affects the Test?

Factors that can interfere with your test or the accuracy of the results include:

- Being treated for cancer. Chromosomes may be damaged by some types of cancer treatment.
- The area where the cells are collected. The results of a karyotype test may depend on whether the cells were collected from the amniotic fluid, the fetus, or the placenta.

You must clear your doubts regarding factors which can affect the test.
(IMAGE: SHOWING CHROMOSE AND DNA (IN THIS TEST CHROMOSOME IS UNDER



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