

WHAT CAN BE DONE IF YOU HAVE AN AUTOSOMAL DOMINANT CONDITION?

While many genetic conditions currently do not have a cure, genetic counselling is recommended, especially when planning for pregnancy. Genetic testing can provide valuable information about the risks and available options.

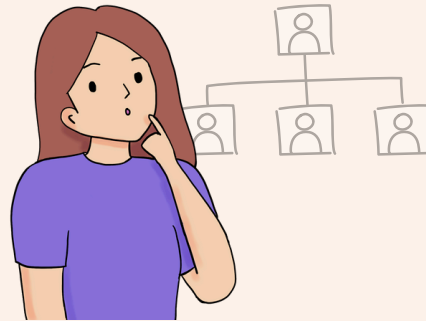
Depending on the genetic test results, the couples may consider:

- Prenatal diagnosis by fetal genetic analysis through chorionic villus sampling or amniocentesis when the couples conceive again.
- In vitro fertilization with special genetic testing called preimplantation genetic diagnosis (PGD) to select unaffected embryos.



SHOULD I TELL MY FAMILY MEMBERS IF I HAVE AN INHERITED CONDITION?

If you have an inherited condition, it is important to inform your family members, as they may also have inherited the condition and could benefit from knowing about it. This is particularly crucial if they are planning to have children. It is recommended for them to seek advice from healthcare professionals to understand the implications and potential risks associated with the condition.



For further enquires, you may contact us.

Department of Clinical Genetics

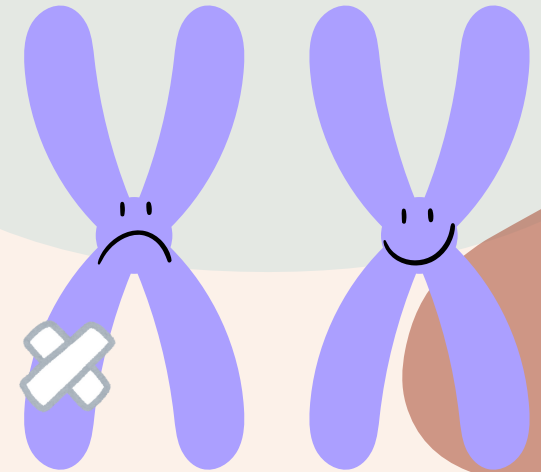
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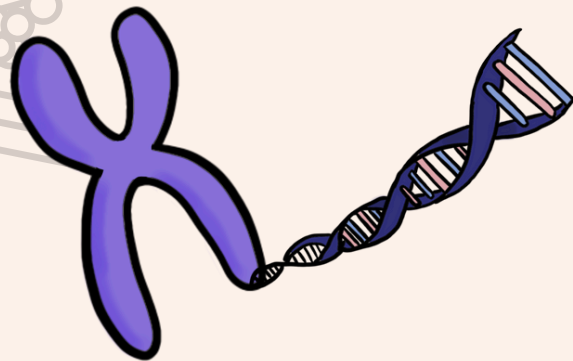
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GENETICS AND GENOMICS CLINIC
DEPARTMENT OF CLINICAL GENETICS



Autosomal Dominant Inheritance

AUTOSOMAL DOMINANT INHERITANCE

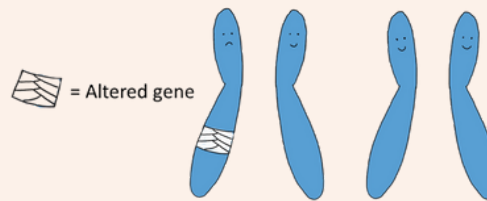


WHAT ARE GENES AND CHROMOSOMES?

Genes act as instructions that guide the growth and functioning of the human body. They are located on structures known as chromosomes. In each cell, there are typically 46 chromosomes arranged in 23 pairs. The first 22 pairs, called autosomes, carry numerous genes responsible for determining human physical characteristics. Chromosomes are inherited from the father and mother, with one set received from each parent.

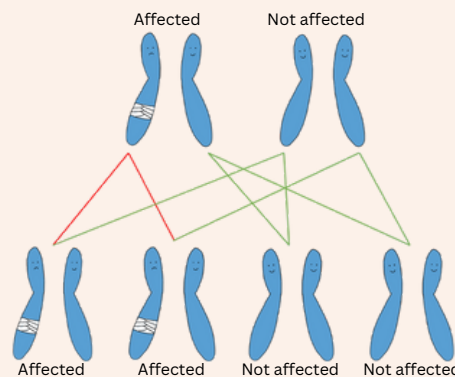
WHAT DOES AUTOSOMAL DOMINANT INHERITANCE MEAN?

Autosomal dominant inheritance is the way certain genetic conditions are passed down through the family in a dominant pattern. In autosomal dominant inheritance, the altered gene is dominant over the other working gene, so having just one altered gene is enough to increase the chance of developing the condition. These conditions can be passed from parents to their children, but sometimes they can also happen by chance.



HAVING CHILDREN

If a parent has an altered gene for a dominant condition, each child has a 50% chance of inheriting the altered gene and being affected by the condition. This chance is the same for both boys and girls.



CAN A DOMINANTLY INHERITED CONDITION SKIP A GENERATION?

In some dominant conditions, an individual can inherit an altered gene without presenting any symptoms, creating the appearance of the disease skipping a generation. However, this does not mean the altered gene has actually skipped a generation. Sometimes, the symptoms may be too mild to be detected because the trait is presenting variably even within the same family. Additionally, some dominant conditions exhibit delayed onset, with symptoms appearing later in life, further contributing to the impression of generational skipping. However, it is important to note that the condition is still present. It just manifests differently among the family members.

