

GENETICS**PATTERNS OF GENETIC TRANSMISSION**

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Abstract: Genetic disorders are broadly classified into three major groups: chromosomal disorders, single gene disorders and multifactorial disorders. Single gene disorders, also known as Mendelian disorders are characterized by their patterns of transmission in families. The pattern of genetic transmission of single gene disorders depends on whether the phenotype is dominant or recessive and whether the gene is located on autosomes or sex chromosomes. Understanding the patterns of inheritance is essential in practice of clinical genetics and is the first step in genetic counseling. This is an overview about the Mendelian and Non Mendelian patterns of genetic transmission.

Keywords: Mendelian inheritance, Single gene disorders, Genetic counseling.

Points to Remember

- *Single gene disorders have a characteristic pattern of genetic transmission.*
- *Mendelian patterns of inheritance depend on whether the phenotype is dominant or recessive and whether the gene is located on an autosome or sex chromosome.*
- *Understanding the patterns of inheritance is essential in providing genetic counseling.*

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