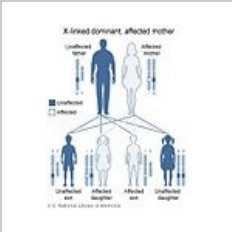
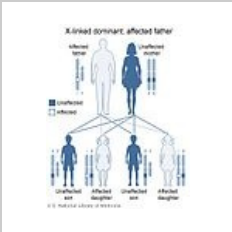
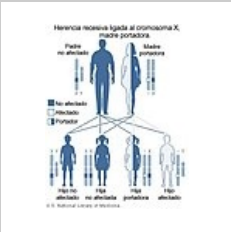
X-linked inheritance

X-linked inheritance is a specific type of inheritance that refers to genes located on the X chromosome. Within the framework of human genetics, it is practically **synonymous with the term gonosomal inheritance** (i.e. inheritance linked to sex chromosomes), since the Y chromosome contains very few genes and Y-linked inheritance we can practically neglect heredity.

According to the interactions of the alleles of the respective gene, we can distinguish between **dominant** and (much more common) **recessive** X-linked inheritance. It should be noted that a man (karyotype 46,XY) is hemizygote (has only one X chromosome) and his phenotype is thus determined by only one allele. On the contrary, in a woman, the resulting expression can be modified by the **process of** lyonization - some women-heterozygotes (carriers) of otherwise recessively inherited diseases can also have a certain phenotypic expression.







Links

Related articles

- Gonosomal inheritance
  - Gonosomal recessive inheritance
  - Gonosomal dominant inheritance
- Autosomal recessive inheritance
- Autosomal dominant inheritance
- Allelic interactions
- X chromosome
- Y linked inheritance

Refrences

- PRITCHARD, Dorian J. – KORF, Bruce R.. *Základy lékařské genetiky.* 1. edition. Praha : Galén, 2007. pp. 182. ISBN 978-80-7262-449-2.