Nanism is a kind of disorder characterized by an extremely small figure. It can be caused by hormonal, genetic or metabolic defects. This work, which is composed by study of materials in the form of article and publication mainly by foreign authors, is concerned with chosen types of nanism and their pathogenesis. All these types of this disease are caused by genetic defects in following genes: *FGFR3, COMP, COL2A1, DTDST* and *PTH/PTHrP*. Point mutations arising *de novo* are frequent cause of nanism and mostly are inherited autosomal-dominantly. It´s a large group of disorders with different seriousness level: from light form like multiple epiphyseal dysplasia to lethal form such as thanatophoric dysplasia.