Corneal dystrophies are a group of diverse bilateral genetic and non-inflammatory diseases limited to the cornea. Clinically, these diseases are categorized into three groups, namely superficial corneal dystrophy, corneal stromal dystrophy, and posterior corneal dystrophy, which are further subcategorized into other classes. Macular corneal dystrophy (MCD) is a subcategory of corneal stromal dystrophies dystrophy. Mutation in the carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 6 (CHST6) gene is usually responsible for MCD. However, all MCD cases cannot be explained by mutations in the CHST6 coding region, deletion/ or replacement in the upstream region, or mutations in splice sites resulting in loss of splicing signal loss.

RP is a disease with a variety of causes various disorders. Some patients show symptoms of loss of vision loss during childhood while some, whereas others live without do not show any symptoms until their middle age. Most cases patients present classical with classic symptoms of difficulties, such as difficulty with in adapting to darkness and night blindness (nyctalopia) in old age and as well as loss of vision in early adolescence. Following the disease progression, the patients lose their distant peripheral vision, develop tunnel vision, and finally lose their central vision, which usually occurs at the age around 60 years of sixty age. The reduction of ROD rods in rod and CONE cones photoreceptors is similar in among other types of RP disorders. Sometimes, the decrease in CONE cones is greater than that in ROD rods, which is then called cone–rod degeneration, a form of RP in which the loss of vision and defects in color vision are the predominant initial symptoms.