Abstract

Fabry disease is an X linked illness caused by mutation in the *GLA* gene which codes lysosomal enzyme α-galactosidase A. The defect of this enzyme leads to progressive storage of neutral glycosphigolipids in the lysosomes which has significant physiological implications. Fabry disease has very variable clinical manifestations because of the combination of many factors, yet not all of them are known. Even though heterozygotic women carry also a wild type allel, they are not asymptomatic. Their symptoms, however, are usually in a milder form. Due the random inactivation of one of the X gonosomes, there is a posibility of skewed X inactivation pattern, which may inflict an increase of symptoms on the disordered woman. Many studies concerning X inactivation have been published, however their conclusions were contradictory. The purpose of this work is to summarise the causes of fenotypic variability in hemizygotes and heterozygotes with skewed X inactivation.