Hypomelanosis of ITO Syndrome

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 Hypomelanosis of Ito Syndrome is mainly a rare health condition which is basically characterized by unique changes in the skin in which parts of the individual’s skin are deprived of skin color which is also called hypo pigmentation. The changes in the skin are often represented as streaks, patches, and even some spiral shaped areas. Although these are some of the most common symptoms of this particular condition but in some individuals various other symptoms also occur that majorly affect the areas outside of the skin (Pavone et al., 2015). There are some other additional symptoms in individuals who have this disease condition such as seizures along with developmental delays and also some musculoskeletal signs that include the irregular curve of the spine these are some of the most common signs that are associated with this disease. There are a majority of patients in which the diseases occur because of genetic abnormalities which are mainly present in some cells of the body but these cells are not present in other parts. The skin changes that occur in the individual occur during the first two years of life. This particular disease is caused by irregular nerve termination in the affected area of the skin (Pavone et al., 2015)...

 Till date the exact cause of this disease is not fully known but there are cases which are linked with genetic mosaicism and other gene mutation. Genetic mosaicims is the term used in people who mainly have two different cell lines in the individual's body which develops due to a gene mutation that occurs during the embryonic development (Ruggieri &Pavone, 2000).Mosaicism normally leads towards two cell lineages which results in the areas of hypo pigmented which refers to the light area of the skin and also hyper pigmented which refers to darker regions of the skin. In case of hypomelanosis of Ito X-chromosome alterations are also quite commonand researches have shown that the activation or inactivation of X-chromosomes is some of the major causes of these color differences in the skin.

 In most of the individuals who have this condition as there are 2 cell lines so the one cell line have normal chromosomes that are 46 but the second cell line does not have the normal cell line. Therefore, it is this second cell lines that may contain various irregularities and abnormalities which majorly affect the chromosome such as a mutation in this specific gene or presence of an additional element on the chromosome which is commonly referred to as trisomy or a portion of a chromosome is lost which is known as monosomy or any other chromosomal translocation. There are some specific chromosomal abnormalities that have been recognized in the cases of hypomelanosis of Ito and some of these abnormalities affect the chromosome 9q33, chromosome 15q11-q13 and also Xp212. these abnormalities occur after the fertilization and they occur for unknown reasons (Taibjee et al., 2004).

**References**

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