Syndrome do not need any necessary treatment.

Literature, Russian Literature

Syndromecan come from new mutations in the gene even without a family history of thedisorder. Two parents had single mutations in MITF or PAX3 and had a doubleheterozygous offspring. The mutated offspring had affected genes MITF and PAX3 andan increase of improper pigmentation symptoms. Double heterozygous mutations ofMITF is one case that can cause the extreme phenotypes of the syndrome. Thisprotein is one of the six affected proteins that cause Waardenburg Syndrome. MITF is a basic leucine zipperprotein involved in several developmental processes. It is particularlyimportant for the development of many different skin, hair, and eye pigments. PAX3is an affected protein that helps develop the brain and from skeletal muscle.

Another important affected protein is SOX10. SOX10, found in sensory nerves, modulatesDNA-binding and contributes to developing the peripheral nervous system incells of the neural crest. All of these proteins work together to ensure properpigmentation by making melanocyte.

Any person that has Waardenburg Syndromeshould not be worried, their life span will not be any shorter than the averageperson’s. Even though there is not a cure for the disorder, mostsymptoms do not need any necessary treatment. If hearing loss is one of thesymptoms, hearing aids or cochlear implants can provide help. If there arebowel nerve problems, constipation, surgery may be needed to remove the portionaffected by the condition helping digestion. White patches of skin, known ashypopigmentation, can also be blended in with the dominant skin color with avarious topical ointments. Unfortunately, Waardenburg Syndromeis hereditary meaning it can be passed from one or both parents to theiroffspring. Rarely

does the mutation that causes Waardenburg syndrome occurspontaneously but is usually passed down through genes.

If one copy of theWaardenburg Syndrome gene is present, there probably are not any obvious signsof having the syndrome. People with this gene have a chance of one out of everytwo to pass the gene on to their offspring.