Vitiligo

Alternative Names
VTLG
Halo Nevi

WHO International Classification of Diseases
Diseases of the skin and subcutaneous tissue

OMIM Number
193200

Mode of Inheritance
Autosomal dominant

Gene Map Locus
6q21.3

Description
Vitiligo is an acquired skin disorder caused by the disappearance of pigment cells from the epidermis that gives rise to well defined white patches which are often symmetrically distributed. In vitiligo, melanocytes in the skin, the mucous membranes, and the retina are destroyed. As a result, white patches of skin appear on different parts of the body. The hair that grows in areas affected by vitiligo usually turns white. The lack of melanin pigment makes the lesional skin more sensitive to sunburn. Vitiligo can be cosmetically disfiguring and it is a stigmatizing condition, leading to serious psychologic problems in daily life. It occurs worldwide in about 0.5% of the population and it occurs as frequently in males as it does in females.

Since a causative (gene) treatment is not (yet) available, current modalities are directed towards stopping progression and to achieving repigmentation in order to repair the morphology and functional deficiencies of the depigmented skin areas. Many treatments have been used for some time; however, there are some new developments: narrowband ultraviolet (UV) B (311 nm) therapy, the combination of corticosteroid cream + UVA therapy, and the transplantation of autologous pigment cells in various modalities. In widespread vitiligo, residual pigment can be removed by depigmentation agents.

Molecular Genetics
The cause of vitiligo is not known, but might involve genetic factors, autoimmunity, neurologic factors, toxic metabolites, and lack of melanocyte growth factors. Vitiligo is sometimes passed from one generation to another. It is considered to be autosomal and polygenic as well as multifactorial. Vitiligo itself is not inherited, but the disposition to have it can be inherited. It is probably a combination of genes that may be the critical factor plus some stimulus capable of starting it off.

Epidemiology in the Arab World

Jordan
Young and Lieber (1987) published the first report on the occurrence of vitiligo in members of an Arab family from Jordan.

Kuwait
Nanda et al. (1999) conducted a prospective survey of pediatric dermatology clinic patients in Kuwait. Of 10,000 consecutive patients analyzed, mostly (96%) children of Arab descent, 149 had vitiligo. The incidence of vitiligo showed a steady increase from 0.4% in infants to 1% in preschool children, and 3.5% in preadolescents. Vitiligo was significantly more prevalent in female children than in males (ratio 1.7:1).

Oman
[See also: United Arab Emirates > Galadari et al. (1997)].

United Arab Emirates
Galadari et al. (1997) studied the clinical and immunological changes encountered in patients
with vitiligo in Al-Ain population, United Arab Emirates (UAE). They conducted a prospective descriptive hospital-based study on 65 patients who were seen at Al-Ain hospital for skin diseases during 1996. Most of the patients were nationals from the United Arab Emirates and Oman. Non-Arab patients were also observed (e.g., Pakistanis). Positive family history of vitiligo was found in 19% of the patients. Association with other immune diseases was found in 6% of the patients while one or more organ specific antibodies, all of whom were females, most of them had positive history of autoimmune diseases (Galadari et al., 1997).

References

Contributors
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