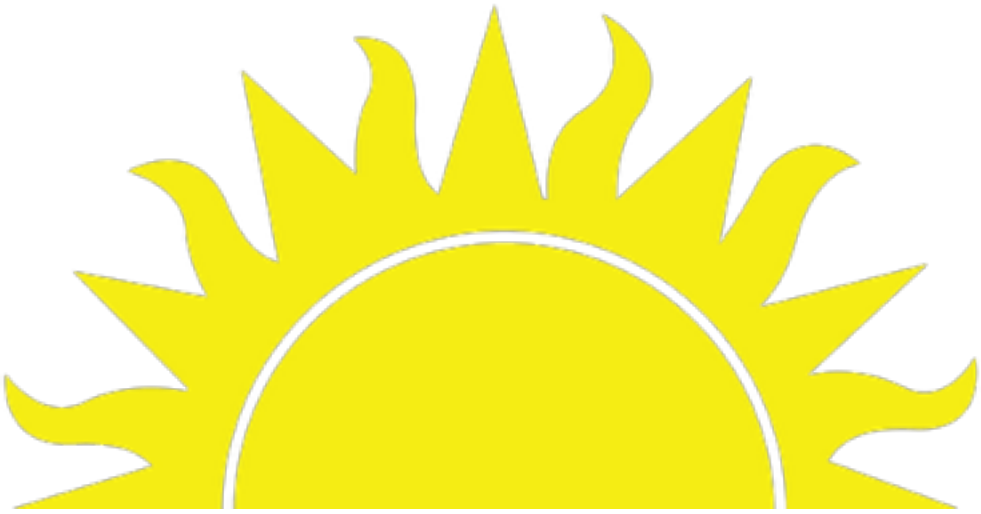
Information About Vitiligo



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What is Vitiligo?

Vitiligo is a disorder in which patches of white skin appear on various parts of the body. The skin is white because the cells responsible for producing brown pigment have disappeared from the affected areas. Vitiligo is a common condition afflicting 3-5% of the population and although it may appear at any age, it most commonly commences in childhood or early adult-life.

Vitiligo is an inherited condition but it frequently skips generations so that only 60-80% of patients know of a family member with the condition. How a genetic defect leads to loss of pigment cells in the skin is only poorly understood. It appears that the immune defense system of the body recognizes the cells as "foreign" and not self and proceeds to kill them. The fact that only some pigment cells are killed and not all of them suggests the defect lies in the cells themselves.

Diagnosis of Vitiligo

Vitiligo can usually be readily diagnosed without resort to any special investigation. Most patients are otherwise healthy and the disorder is limited to the skin. However, about one in five patients have had, or will have, increased or decreased function of the thyroid gland. If any symptoms suggest a thyroid disturbance this can easily be investigated by appropriate blood tests.

The Course of Vitiligo

Once vitiligo has appeared its course is erratic and unpredictable. The only statement which can be made with certainly is that it is very unlikely that vitiligo will go away. Some patients remain stable without any progression for many years, while at the other extreme some patients show rapid progression over only a few months.

Several studies, involving years of observations of large number of patients, have attempted to identify markers to allow prediction of the probable course in the individual patient. The only marker identified in this way is that if the vitiligo appears at the sites of trauma to the skin, such as an abrasion or scratch mark, then fairly rapid progression is more likely.

Approaches to Treatment of Vitiligo

Vitiligo is often brushed aside as being "just a cosmetic defect" with the inference that it does not require any treatment. This is incorrect because every patient requires some treatment. The treatment should be tailored individually to the needs of the patients, the extent and location of the vitiligo, and the likely response to the given treatment. The possible approaches are:

Sunscreen and Avoidance of the Sun

This is the minimum treatment that must be used by any patient with vitiligo on exposed areas of the body.

The reason is simple: the skin in a patch of vitiligo has lost most of its protection against the damaging effects of ultraviolet light in sunlight. If left unprotected, premature aging of the skin and ultimately skin cancer are inevitable consequences. A patient with vitiligo should avoid exposing the white areas to sunlight. If exposure is inevitable, as for example with vitiligo on the face and hands, daily application of a sun- screen SPF 15 or higher is essential from March to November.

Masking

Masking Dyes are available which can be applied to the skin every few days to camouflage areas of vitiligo. However, the usefulness of these preparations varies between individuals and in general it is most successful in olive-skinned people. In fair-skinned and black people, it tends to have a greenish hue. It is most important to remember dyes do not provide any protection against sunlight.

Cosmetics are available to mask small areas of vitiligo on the face and these can be matched to the normal skin color.

Repigmentation

Treatment with ultraviolet light therapy is the main means of restoring pigment to the white areas of vitiligo. Two types of light therapy are effective in vitiligo. PUVA therapy and narrow-band UVB (311) phototherapy. PUVA therapy consists of taking a medication called psoralens and then being exposed to ultraviolet A light. Psoralens are

distributed to the skin and there interact with the UVA light to stimulate formation of new pigment cells in the skin. Narrow-band phototherapy does not involve taking a medication and has a similar but probably less powerful effect on pigment cells.

PUVA therapy has been used in India and the Middle-east for several thousand years for treatment of vitiligo and it has been used in America since 1952. Sunlight was used as the source of UVA light, but recently, more effective indoor sources of light have been developed. These improvements to the treatment have resulted in much better response rates and also have allowed definition of what the likely response will be in an individual patient. Narrow-band phototherapy was introduced in the 1990s.

Light therapy produces some repigmentation in almost all patients but the extent of repigmentation does vary. The chief determinant of the response is the location of the vitiligo. Vitiligo on the face almost always responds completely, the trunk has a less favorable response and so on down to the tips of the fingers and toes, which almost never respond. The duration and extent of vitiligo do not influence the response.

Treatment has to be given two or three times each week. A trial of thirty treatments gives a fairly accurate indication of whether or not treatment will be worthwhile. If there is no response by treatment number thirty, it is pointless to continue. Treatment number fifty is the next milestone: if the response is not sustained it is unlikely that further repigmentation will occur.

Light therapy does not stop new areas of vitiligo appearing and repigmented areas can lose pigment again. However, it is very unusual for a patient to continue to show progression of vitiligo after 20-30 treatments. Furthermore, if a given patch of vitiligo is completely repigmented and filled in, it is very unusual to again lose the pigment; partial repigmentation of a patch is frequently lost.

The most recent light treatment for vitiligo involves use of an excimer laser. This is only practical for small areas of vitiligo and it is regarded as experimental by most insurance carriers.

*Note that other sources of ultraviolet light such as tanning parlors rarely produce pigmentation in vitiligo.

Skin Grafting

This is a technique used to supplement the effect of phototherapy in returning pigment to the skin. The cells that make brown pigment are in the most superficial, outer layer of the skin and this layer can be painlessly and easily raised by a suction machine that forms a blister. The superficial grafts are taken from the buttocks and transferred to white areas of vitiligo. Two or three weeks after grafting, phototherapy is resumed and the grafts expand to help fill in the white areas.

Depigmentation

A few patients have such extensive vitiligo that consideration can be given to attempting removal of the remaining pigment so the skin is all one color. Usually this is not worth considering unless the vitiligo covers at least 90% of the body. The agent used to remove pigment is applied as a cream and since it is slow acting, treatment is necessary daily for 6-12 months. The main problem with this treatment is that it can trigger an allergic reaction in the form of eczema and this usually means the treatment has to be suspended.