

## Vitiligo

Vitiligo is a skin condition whose exact cause is unknown. In vitiligo, patches of skin lose their pigmentation when the pigment producing cells (the “melanocytes”) are attacked and destroyed. It may affect the skin, mucous membranes, eyes, inner ear or hairs leaving white patches. The usual type of vitiligo is called “Vitiligo Vulgaris” (means: common vitiligo). Variant types include linear, segmental, trichrome and inflammatory vitiligo.

This disease affects an estimated 1% of the world’s population. It affects individuals of all ethnic origins and both sexes, but is much more easily noticed on darker skin as areas that fail to tan. It is hereditary in one third of those affected. Vitiligo often starts on the hands, feet or face, and frequently pigment loss is progressive. Half the patients first notice vitiligo before 20 years of age. It often appears in an area of minor injury or sunburn.

It is believed that vitiligo is an autoimmune disorder (autoimmune means the bodies own immune system turns on itself). Certain white blood cells direct the destruction of melanocytes. People with vitiligo are also somewhat more prone to other autoimmune diseases, such as alopecia areata, autoimmune thyroid disorders, Addison’s disease, pernicious anemia, and diabetes mellitus.

The diagnosis of vitiligo is usually straightforward, and no special testing is needed. However, there are conditions that are occasionally misdiagnosed as vitiligo. If these are suspected, a skin biopsy or other tests may be required. These conditions include: chemical leukoderma, tinea versicolor, pityriasis alba, piebaldism, tuberous sclerosis, Hansen’s disease, morphea, lichen sclerosis, post-inflammatory hypopigmentation and the Vogt-Koyanagi syndrome.

While vitiligo is a cosmetic problem and does not affect the health directly, it is disfiguring and may be psychologically traumatic. The condition can not be cured at present, but treatments are available that may be very helpful. Medical treatments target the immune system, and try to reverse the destruction. Surgical treatments are less commonly done, and transplant healthy melanocytes from other areas. Both treatments may be difficult and prolonged.

The goal is to restore the skin’s color by restoring healthy melanocytes to the skin (“Repigmentation”) allowing the skin to regain its normal appearance. That means that new pigment cells must come from the base of hair follicles, from the edge of the lesion, or from the patch of vitiligo itself if depigmentation is not complete. Repigmentation occurs slowly as the cells creep back in over months to years.

Prescription steroid creams are the safest and simplest initial treatment, especially for recently diagnosed or spreading vitiligo. They are usually applied twice daily, and results require three to six months. If over-dosed or over-used, side effects include local skin damage, and glaucoma or cataracts when used around the eyes. Regular monitoring and adjusting the potency of the creams to be appropriate for the location can avoid these side effects.

For extensive vitiligo, systemic repigmentation can be tried. The treatment most commonly used is PUVA (psoralens & Ultra-Violet A light). PUVA is partially successful in over half of those treated, but complete repigmentation occurs in only 15-20%. Treatments are given in the office in a special booth 2 or 3 times weekly. It takes at least 2-3 months to begin having an effect and 200 treatment sessions are not unusual. Many insurance plans no longer cover this. Older people, those with pigment loss for more than 5 years and the hands and feet areas usually respond poorly.

Another method of psoralen treatment, used occasionally for children or patients with small, scattered vitiligo patches, involves the application of a very dilute solution of the drug directly to the affected skin area. This is then exposed to sunlight. Such topical treatment makes a person very susceptible to severe burn and blisters following too much sun exposure. It has the advantages of being done at home, and does not damage the entire skin surface, as PUVA does. Recently, some experts have claimed that another form of light treatment-UVB-is just as effective and safer.

If you don't respond to PUVA treatment, and your vitiligo has not changed in the last year you may consider surgical treatment of vitiligo. Avoid surgical treatment if you scar abnormally or sometimes have lost pigment after a small cut or scrape. All surgical therapies must be viewed as experimental because their effectiveness and side effects remain to be fully defined.

Autologous skin grafts take normal, pigmented skin from one area of a patient's body (donor sites) and attach it to an area of vitiligo. This type of skin grafting is sometimes used for patients with small, stable patches of vitiligo (recipient sites). Skin grafts work, but the site from which the skin is taken (the thigh or buttocks are often used) are often left with scarring. The treated area responds almost 90% of the time, but may develop a cobblestone appearance, or a spotty pigmentation, or may fail to re-pigment at all.

Recent improvements on the grafting procedure include skin grafts using the tops of suction blisters or growing the patient's melanocytes in test tubes, and injecting them into the blister cavities (autologous melanocyte transplants). There appears to be less risk of scarring with these procedures than the other type of grafting.

Covermark and Dermablend are special drug store cosmetics that can be used to match most skin hues.

Sunless tanning preparations (Chromelin complexion blender) may be used to darken the vitiligo a more acceptable color. These will cover small areas of vitiligo well. Micropigmentation (Tattooing) is rarely recommended. It works best for the lip area, particularly in people with dark skin; however, it is difficult to perfectly match the skin, and tends to look worse over time. For loss of pigment over more than half of the exposed areas of the body, depigmentation therapy can be considered. This is the permanent (or nearly permanent) bleaching out of all pigmentation. The remaining skin will be an even white color, which can then be covered with the cosmetics.

Sun-induced darkening of the surrounding normal skin vitiligo looks worse. All patients with vitiligo should always protect their depigmented skin against excessive sun exposure by wearing protective clothing, applying a sunscreen with Parsol 1789 (Ombrelle or Presun ultra) daily, and avoid prolonged sun exposure.