

Vitiligo

Vitiligo is a skin condition of white patches resulting from loss of pigment. Any part of the body may be affected. Usually both sides of the body are similarly affected by a few too many milky-white patches.

Common areas of involvement are:

- face
- lips
- hands
- arms
- legs
- genital areas

Who Gets Vitiligo?

Vitiligo affects one or two of every 100 people. About half the people who develop it do so before the age of 20; about one fifth have a family member with this condition. Most people with vitiligo are in good general health.

What Determines Skin Color?

Melanin, the pigment that determines color of skin, hair, and eyes, is produced in cells called melanocytes. If these cells die or cannot form melanin, the skin becomes lighter or completely white.

What Causes Vitiligo?

Vitiligo is the result of the disappearance of the skin's melanocytes. No one knows why, but four main theories exist:

1. Abnormally functioning nerve cells may make toxic substances that injure melanocytes.
2. The body's immune system may destroy melanocytes. Researchers think pigment may be destroyed as the body responds to a substance it perceives as foreign.
3. Pigment-producing cells may self-destruct.
While pigment is forming, toxic byproducts could be produced and destroy melanocytes.
4. There is a genetic defect that makes the melanocytes susceptible to injury.

How Does Vitiligo Develop?

The course and severity of pigment loss differ with each person. Light-skinned people usually notice the contrast between areas of vitiligo and suntanned skin in the summer. Year round,

vitiligo is more obvious on people with darker skin. Individuals with severe cases can lose pigment virtually everywhere. There is no way to predict how much pigment an individual will lose.

Typical vitiligo shows areas of milky-white skin. However, the degree of pigment loss can vary within each vitiligo patch. There may be different shades of pigment in a patch or a border of darker skin may circle an area of light skin.

Vitiligo often begins with a rapid loss of pigment. This may continue until, for unknown reasons, the process stops. Cycles of pigment loss, followed by times where the pigment doesn't change, may continue indefinitely.

It is rare for skin pigment in vitiligo patients to return on its own. Some people who believe they no longer have vitiligo actually have lost all their pigment and no longer have patches of contrasting skin color. While their skin is all one color, they still have vitiligo.

How is Vitiligo Treated?

Sometimes the best treatment for vitiligo is no treatment at all. In fair-skinned individuals, avoiding tanning of normal skin can make areas of vitiligo almost unnoticeable. The white skin of vitiligo has no natural protection from sun. These areas are very easily sunburned. A sunscreen with a SPF of at least 15 should be used on all areas of vitiligo not covered by clothing. Avoid the sun when it is most intense to avoid burns.

Disguising vitiligo with make-up, self-tanning compounds or dyes is a safe, easy way to make it less noticeable. Waterproof cosmetics to match almost all skin colors are available at many

large department stores. Stains that dye the skin can be used to dye the white patches to more closely match normal skin color. These stains gradually wear off. Self-tanning compounds contain a chemical called dihydroxyacetone that does not need melanocytes to make the skin a tan color. The color from self-tanning creams also slowly wears off. None of these change the disease, but they can improve appearance. Micropigmentation tattooing of small areas may be helpful.

If sunscreens and cover-ups are not satisfactory, your doctor may recommend other treatment. Treatment can be aimed at returning normal pigment (repigmentation) or destroying remaining pigment (depigmentation). None of the repigmentation methods are total, permanent cures.

Repigmentation Therapy

Topical Corticosteroids - Creams containing corticosteroid compounds can be effective in returning pigment to small areas of vitiligo. These can be used along with other treatments. These agents can thin the skin or even cause stretch marks in certain areas. They should be used under your dermatologist's care.

PUVA - a form of repigmentation therapy where a type of medication known as psoralen is given. This chemical makes the skin very sensitive to light. Then the skin is treated with a special type of ultraviolet light called UVA. Special medical equipment is needed for this treatment. Sometimes, when vitiligo is very limited, psoralens can be applied to the skin before UVA treatments.

Usually, however, psoralens are given in pill form. Treatment with PUVA has a 50-70% chance of returning color on the face, trunk, and upper arms and upper legs. Hands and feet respond very poorly. Usually, at least a year of twice weekly treatments are required. PUVA must be given under very close supervision by your dermatologist. Side effects of PUVA include sunburn-type reactions. When used long term, freckling of the skin can result and there is an increased risk of skin cancer. Because psoralens also make the eyes more sensitive to light, UVA blocking eyeglasses must be worn from the time of exposure to psoralen until sunset that day. This eye protection is needed to prevent an increased risk of cataracts.

PUVA is not usually used in children under the age of 12, in pregnant or breast feeding women or in individuals with certain medical conditions.

Grafting - Transfer of skin from normal to white areas is a treatment available only in certain areas of the country and is useful for only a small group of vitiligo patients. It does not generally result in total return of pigment in treated areas.

Depigmentation Therapy

For some patients with severe involvement, the most practical treatment for vitiligo is to remove remaining pigment from normal skin and make the whole body an even white color. This is done with a chemical called monobenzylether of hydroquinone. This therapy takes about a year to complete. The pigment removal is permanent.

Treatment of Vitiligo in Children

Aggressive treatment is generally not used in children. Sunscreen and cover-up measures are usually the best treatments. Topical corticosteroids can also be used, but must be monitored. PUVA is usually not recommended until after age 12, and then the risks and benefits of this treatment must be carefully weighed.

Is Vitiligo Curable?

Research is ongoing in vitiligo and it is hoped that new treatments will be developed. At this time, the exact cause of vitiligo is not known and although treatment is available, there is no single cure.

