



Authoritative facts about the skin from the [New Zealand Dermatological Society Incorporated](#).

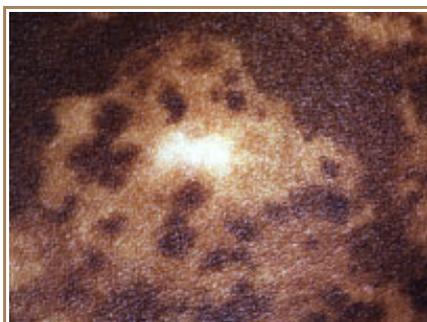
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Viteligo

Viteligo is an autoimmune disease in which pigment cells (melanocytes) are destroyed, resulting in irregularly shaped white patches on the skin. Any part of the body may be affected. Common sites are exposed areas (face, neck, eyes, nostrils, nipples, navel, genitalia), body folds (armpits, groin), sites of injury (cuts, scrapes, burns) and around pigmented moles ([halo naevi](#)). The hair may also go grey early on the scalp, eyebrows, eyelashes and body. White hair is called 'poliosis'. The retina may also be affected.



Viteligo



Mucosal vitiligo

Trichrome vitiligo

Poliosis

Who is prone to vitiligo?

Viteligo affects at least 1% of the population, and occurs in all races. In half of sufferers, pigment loss begins before the age of 20. In one fifth, other family members also have vitiligo.

Even though most people with vitiligo are in good general health, they face a greater risk of having other autoimmune diseases such as diabetes, thyroid disease, pernicious anaemia (B12 deficiency), [Addison's Disease](#) (adrenal gland disease) and [alopecia areata](#) (round patches of hair loss).

What is the cause of vitiligo?

Melanin is the pigment that determines the colour of skin, hair, and eyes. It is produced in cells called melanocytes. If melanocytes cannot form melanin or if their number decreases, skin colour will become

progressively lighter.

The cause of vitiligo is not known. It sometimes follows physical injury such as sunburn, or emotional stress. There are three theories on the cause of vitiligo:

- The pigment cells are injured by abnormally functioning nerve cells.
- There may be an autoimmune reaction against the pigment cells (the body may destroy its own tissue, which it perceives as foreign).
- Autotoxic theory – the pigment cells are self-destructive.

The severity of vitiligo differs with each individual. Light skinned people usually notice the pigment loss during the summer as the contrast between the affected skin and sun tanned skin becomes more distinct. People with dark skin may observe the onset of vitiligo any time. In a severe case pigment may be lost from the entire body. The eyes do not change colour. There is no way to predict how much pigment an individual will lose.

The degree of pigment loss can vary within each vitiligo patch which means that there may be different shades of brown in a vitiligo patch. This is called 'trichrome'. A border of darker skin may circle an area of light skin.

Vitiligo frequently begins with a rapid loss of pigment which may be followed by a lengthy period when the skin colour does not change. Later, the pigment loss may begin again. The loss of colour may continue until, for unknown reasons, the process stops. Cycles of pigment loss followed by periods of stability may continue indefinitely.

Other causes of white skin ([leukoderma](#)) include severe trauma, burns, and deep skin infections.

Protection against sun exposure

The white skin needs [sun protection](#) because it can only burn, it cannot tan. The normal skin also needs protecting to prevent sunburn (which could cause spreading of the vitiligo), and to reduce the contrast between the normal and the white skin.

- Wear [protective clothing](#).
- Stay out of the sun at peak periods.
- Apply [sunscreen](#) (Sun Protection Factor 30+).

Sunburn in vitiligo



Images supplied by Dr Shahbaz A. Janjua

Use of cosmetics

- Cosmetics are helpful to disguise the vitiligo. Dyes, stains and make-ups can be applied and with specialist help the results can be very satisfactory.
- [Dihydroxyacetone](#)-containing "tan without sun" products; take care not to apply to the normally tanned skin because this will also look darker.
- Water-resistant concealing make-up.

Treatment

Treatment is currently not very satisfactory.

- [Topical steroid](#) cream. A potent anti-inflammatory cortisone cream may reverse the process if applied to the affected areas for a few weeks in their early stages.
- Calcineurin inhibitors such as topical [pimecrolimus](#) and [tacrolimus](#) have recently been shown to be safe and effective, and is especially useful on the face and neck where strong steroid creams may cause skin thinning.
- [PUVA](#). This form of light treatment requires the patient to take a psoralen medicine and then be exposed to ultraviolet light (UVA). Gradual but partial repigmentation may results. Hands and feet respond poorly, faces and trunks do better. When the treatment is stopped, some of the pigment disappears again. PUVA takes less than five minutes twice weekly, and is continued for up to two years. PUVA is unsuitable for children or very fair skinned people. The pigment loss should have been present for less than 5 years.
- [Narrowband UVB phototherapy](#) has recently also been shown to be helpful in some patients, particularly in combination with [calcipotriol](#) cream (usually used in [psoriasis](#)).
- Surgical treatment. Experimentally some centres are removing the top layer of skin by various techniques (including dermabrasion or sandpapering) and replacing it with skin with normal pigmentation from another site. Some researchers have used the patient's own melanocytes grown in tissue culture. Good results are reported, especially if the vitiligo is stable.

Depigmentation therapy

If a dark skinned person has vitiligo affecting a large part of the exposed areas, he or she may wish to undergo depigmentation. A cream containing monobenzyl ether of hydroquinone is applied to the skin. This causes all the skin to lose its pigment. Its effect is usually permanent.

Related information

On DermNet NZ:

- [Leukoderma](#)
- [Skin pigmentation](#)

Other websites:

- [National Vitiligo Foundation Inc.](#)
- [Dr Kahn's surgical method](#) for repigmentation
- [Vitiligo](#) - emedicine dermatology, the online textbook

Books:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

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