CONDITION

Vitiligo

Vitiligo is a long-term condition that causes patches of skin to lose their natural color.

WHAT IT IS
Long-term loss of skin pigment in distinct patches

BODY SYSTEM
Skin and hair

MAIN SYMPTOMS
White skin patches, pale hair, color loss inside mouth

WHAT CAUSES IT
Immune attack on pigment-making cells, with genetic susceptibility

HOW IT IS DIAGNOSED
Skin examination, often with a Wood's lamp

MAIN TREATMENT
Topical medicines, light therapy, camouflage, and sun protection

CAN IT BE CURED?
No - repigmentation may not last

IS IT AN EMERGENCY?
No - not dangerous by itself

LONG-TERM OUTLOOK
Chronic, unpredictable pigment loss that is often manageable

Overview

Vitiligo is a long-term condition in which areas of skin lose their natural color. It happens when melanocytes, the cells that make the pigment melanin, stop working or are destroyed.

The affected areas usually become pale or completely white. Vitiligo can also affect hair and, less often, the lining inside the mouth or nose. It may involve a small area or spread across larger parts of the body.

Vitiligo can occur in people of every skin tone. It is often more noticeable on darker skin because there is a stronger contrast between affected and unaffected areas.

The condition is not contagious. You cannot catch it from another person or pass it through touch. It is not caused by poor hygiene, and it is not a type of skin cancer.

Vitiligo does not usually affect physical health. However, changes in appearance can affect

confidence, relationships, work, and emotional well-being. Medical care can help confirm the diagnosis, check for related conditions, and discuss treatment or camouflage options.

Symptoms

The main sign is one or more clearly defined patches of pale or white skin. The surface usually feels normal. Vitiligo does not typically cause scaling, thickening, pain, or open sores.

Common locations include:

Hair growing from an affected area may become white or gray. This can involve scalp hair, eyebrows, eyelashes, beard hair, or body hair. Pigment may also be lost from the tissues inside the mouth, although this is less common.

Non-segmental vitiligo is the most common pattern. Patches often appear on both sides of the body and may slowly enlarge or appear in new places.

Segmental vitiligo affects one region or one side of the body. It often begins at a younger age, spreads for a limited period, and then becomes more stable.

Some people notice mild itching before or during the appearance of a new patch, but most patches cause no physical symptoms. The contrast may become clearer after surrounding skin tans.

- The face, especially around the eyes and mouth
- Hands, fingers, wrists, elbows, knees, and feet
- Armpits, groin, and genitals
- Areas around body openings, such as the nostrils
- Skin that is often rubbed or injured

Causes and risk factors

Vitiligo is usually considered an autoimmune condition. This means the immune system mistakenly targets the body's own melanocytes. Researchers do not fully understand why this begins.

Genetics also play a part. Having a close relative with vitiligo increases the chance of developing it, but most children of people with vitiligo do not necessarily develop the condition. It is not caused by one simple inherited gene.

Vitiligo is associated with some other autoimmune conditions, particularly autoimmune thyroid

conditions. Less commonly, it may occur alongside conditions such as type 1 diabetes, pernicious anemia, or certain forms of hair loss. Having vitiligo does not mean that you have, or will develop, one of these conditions.

Skin injury can sometimes lead to a new patch in a person who already has vitiligo. This is called the Koebner phenomenon. Cuts, repeated rubbing, burns, tattoos, and severe sunburn are possible triggers.

Emotional stress is sometimes reported around the time vitiligo starts or spreads, but stress alone is not considered the cause. Food choices, poor cleanliness, or contact with someone who has vitiligo do not cause it.

Diagnosis

A healthcare professional can often diagnose vitiligo by examining your skin and asking how the patches developed. They may ask about changes in hair color, family history, other symptoms, medicines, and previous skin injuries.

A Wood's lamp may be used during the examination. This device shines ultraviolet light onto the skin in a dark room. Areas of vitiligo usually appear bright white, which can make subtle pigment loss easier to see.

Other conditions can resemble vitiligo. These include fungal infections, inflammation that leaves a pale area behind, chemical damage, and some inherited pigment conditions. A skin scraping or other test may be used if an infection is possible.

A skin biopsy, in which a very small sample is examined under a microscope, is rarely needed. There is no blood test that confirms vitiligo itself. Blood tests may be considered if your symptoms, examination, or medical history suggest a related autoimmune condition, such as a thyroid problem.

Photographs can help document the location and size of patches over time.

Treatment and management

Treatment is optional. Some people want to restore pigment, while others prefer camouflage, sun protection, or no active treatment. The choice may be influenced by where the patches are, whether they are spreading, and how much they affect daily life.

Treatment cannot guarantee permanent color restoration. Results often take months, and some areas respond better than others. The face and trunk tend to respond more readily than

fingers, toes, or areas where the hair has turned white.

Topical corticosteroids can reduce immune activity in the skin and may help pigment return. Long-term or unsuitable use can thin the skin or cause other side effects, so medical supervision is important.

Topical calcineurin inhibitors, such as tacrolimus or pimecrolimus, also reduce local immune activity. They may be considered for areas such as the face or skin folds because they do not cause skin thinning. Temporary burning or warmth can occur.

Topical ruxolitinib is a Janus kinase, or JAK, inhibitor. It is approved in some countries for certain people with non-segmental vitiligo. It is not suitable for everyone, and there are limits on how much skin should be treated. Access and approval differ by country.

Narrowband ultraviolet B phototherapy exposes the skin to a controlled form of ultraviolet light. It may be used when vitiligo is widespread or actively progressing. Treatment usually requires repeated visits over many months. Targeted devices, such as an excimer laser or lamp, may be used for smaller areas.

A specialist may sometimes use short-term treatment to slow rapidly spreading vitiligo. Surgical techniques, including transferring pigment-containing skin cells, may be considered for stable vitiligo that has not responded to other care. These procedures are not suitable while patches are still changing.

For very extensive vitiligo, permanent removal of the remaining pigment is rarely considered. This is a major and usually irreversible decision requiring specialist assessment.

Cosmetic camouflage, self-tanning products, and skin dyes can reduce visible contrast without changing the condition itself. Sunscreen and protective clothing help prevent sunburn in areas without pigment. Sun protection also limits tanning of surrounding skin, which can make patches less noticeable.

Counselling or peer support may help if vitiligo affects your mood, self-esteem, or social life.

Complications

Skin without melanin has less natural protection from sunlight, so affected areas can burn more easily. Regular sun protection is important, although current evidence does not show that vitiligo itself clearly raises the overall risk of melanoma or other skin cancers.

The emotional effects can be significant. Some people experience embarrassment, unwanted attention, anxiety, low mood, or social withdrawal. These effects deserve care even though the skin changes are not physically harmful.

Vitiligo can occur with other autoimmune conditions. Thyroid conditions are the most common association. Symptoms such as persistent tiredness, unexplained weight change, feeling unusually hot or cold, or a racing heartbeat should be discussed during routine medical care.

Pigment cells are also present in parts of the eyes and inner ears. Eye inflammation or hearing changes have been reported, but they are uncommon. Most people with vitiligo do not develop vision or hearing problems.

Prevention

Vitiligo cannot currently be prevented because its autoimmune and genetic causes cannot be fully controlled.

Protecting your skin from severe sunburn, repeated friction, and unnecessary injury may reduce the chance of new patches appearing after skin damage. This does not guarantee that vitiligo will remain stable.

There is no proven diet, vitamin, supplement, or detox program that prevents vitiligo. A balanced diet supports general health, but removing particular foods is unlikely to stop pigment loss unless you have another medical reason to avoid them.

Living with it and what to expect

Vitiligo is usually a lifelong condition, but its course is unpredictable. A patch may remain unchanged for years, slowly enlarge, or be followed by new patches. Periods of spreading may alternate with long periods of stability.

Non-segmental vitiligo often has a long-term pattern of activity and stability. Segmental vitiligo commonly spreads earlier and then becomes stable, although no individual course can be promised.

Pigment may return on its own, especially around hair follicles, creating small dots of color within a patch. Treatment can improve the chance of repigmentation, but the restored color may not be complete or permanent. Maintenance treatment is sometimes considered after a good response.

White hair within a patch may mean that fewer working melanocytes remain in that area, making treatment less likely to restore color. Hands and feet can also be difficult to repigment.

Vitiligo does not usually limit exercise, work, travel, sexual activity, pregnancy, or life expectancy. Practical adjustments often focus on sun protection and managing how visible

patches feel to you.

You may choose to treat some areas and not others. Your preferences can also change over time. Follow-up is useful if patches are spreading, treatment needs monitoring, or you develop symptoms of a related autoimmune condition.

When to get medical help

Arrange a routine appointment if you develop unexplained pale or white patches. An examination can distinguish vitiligo from infections and other causes of pigment loss.

Routine follow-up is also appropriate if:

Vitiligo itself is not an emergency. Seek urgent medical care for eye pain, marked eye redness, or a sudden change in vision, as these are not typical vitiligo symptoms and need separate assessment.

Get emergency help for trouble breathing, swelling of the face or throat, fainting, or a widespread blistering rash after using a medicine. These may indicate a severe reaction rather than vitiligo.

- Existing patches are spreading quickly or appearing in many new areas
- A treatment is irritating your skin or is not helping as expected
- Vitiligo is affecting your mood, confidence, work, school, or relationships
- You develop possible thyroid symptoms or unexplained changes in health
- You want to discuss camouflage, phototherapy, or specialist treatment

Common questions

Is vitiligo contagious?

No. Vitiligo cannot spread from one person to another through touch, shared items, sex, food, or close contact.

Can vitiligo be cured permanently?

There is no permanent cure at present. Treatment can slow active pigment loss and help color return, but results differ by body area and repigmentation can later fade.

Does vitiligo always spread?

No. Some people have one or a few patches that remain stable. Others develop new or larger

patches over time. An examination cannot predict the exact course for one person.

Does stress make vitiligo worse?

Stress is not the underlying cause. Some people report spreading during stressful periods, but the connection is not consistent. Managing stress may support well-being even if it does not change the skin directly.

Can sunlight bring the color back?

Ordinary sun exposure is not a safe treatment and can burn skin that lacks pigment. Medical phototherapy uses carefully controlled ultraviolet light. If phototherapy is appropriate, it should be planned and monitored by a trained healthcare team.

Do I need a special diet for vitiligo?

No specific diet has been shown to cure or reliably control vitiligo. Supplements should not replace medical treatment, and high doses can cause harm. Testing or dietary changes may be appropriate if there is evidence of a separate deficiency or condition.

Sources

- British Association of Dermatologists. British Association of Dermatologists guidelines for the management of people with vitiligo 2021 . British Journal of Dermatology. 2022;186(1):18-29.
- Bergqvist C, Ezzedine K. Vitiligo: A Review . Dermatology. 2020;236(6):571-592.
- National Institute of Arthritis and Musculoskeletal and Skin Diseases. Vitiligo . US National Institutes of Health.
- American Academy of Dermatology Association. Vitiligo: Diagnosis and treatment and Vitiligo: Signs and symptoms .
- US Food and Drug Administration. OPZELURA (ruxolitinib) cream prescribing information . Incyte Corporation.
- Ezzedine K, Lim HW, Suzuki T, and colleagues. Revised classification and nomenclature of vitiligo and related issues: the Vitiligo Global Issues Consensus Conference . Pigment Cell & Melanoma Research. 2012;25(3):E1-E13.