CONDITION

# Granuloma fungoides

Granuloma fungoides is a slow-growing lymphoma of skin-homing T cells that often begins as persistent patches.

**WHAT IT IS**
A type of skin T-cell lymphoma

**BODY SYSTEM**
Skin and immune system

**MAIN SYMPTOMS**
Persistent patches, raised plaques, itching, skin tumors

**WHAT CAUSES IT**
Unknown, with acquired changes in immune cells

**HOW IT IS DIAGNOSED**
Skin biopsies with cell and genetic testing

**MAIN TREATMENT**
Skin-directed therapy; systemic treatment for advanced cases

**CAN IT BE CURED?**
Sometimes - selected treatments can produce lasting remission

**IS IT AN EMERGENCY?**
Sometimes - rapidly worsening symptoms or serious infection

**LONG-TERM OUTLOOK**
Often slow-growing early; advanced forms have poorer outcomes

## Overview

Granuloma fungoides is an older name for mycosis fungoides, the most common type of cutaneous T-cell lymphoma. "Cutaneous" means involving the skin. A lymphoma is a cancer of lymphocytes, which are white blood cells that form part of the immune system.

In this condition, abnormal T cells collect in the skin. It often begins with flat, discoloured patches that can resemble eczema, psoriasis, or another long-lasting rash. Some patches later become thicker plaques. A smaller number of people develop skin tumors or lymphoma outside the skin.

Despite the historical name "mycosis fungoides," this is not a fungal infection. It is not caused by poor hygiene and cannot spread from one person to another.

Granuloma fungoides usually develops slowly, often over years. Early diagnosis can be difficult because its appearance overlaps with common skin conditions. The outlook and treatment needs are strongly linked to the amount of skin involved, the type of skin lesions, and whether abnormal cells are present elsewhere in the body.

## Symptoms

The first signs are often persistent, slightly scaly patches. They may be red, pink, brown, purple, or lighter or darker than the surrounding skin. Their colour can look different across skin tones.

Patches commonly appear on areas usually covered by clothing, such as the buttocks, hips, thighs, lower abdomen, or breasts. However, any area can be affected. They may come and go at first or slowly enlarge.

Possible symptoms include:

Skin tumors may be dome-shaped or irregular. They can break down and form open sores, increasing the risk of infection.

More extensive granuloma fungoides can cause widespread redness and scaling. If lymphoma affects lymph nodes, they may become enlarged. Advanced involvement of the blood or internal organs is uncommon in people with early-stage skin patches but can occur later.

These symptoms have many possible causes. A persistent rash does not by itself mean that you have lymphoma.

- Flat, dry, or scaly patches that do not clear
- Thicker, raised areas called plaques
- Itching, which may be mild or severe
- Changes in skin colour
- Hair loss or reduced sweating in affected areas
- Lumps or tumors on the skin in more advanced stages

## Causes and risk factors

The exact cause is unknown. The condition develops when T cells acquire changes that affect how they grow, survive, and move into the skin. These changes are usually acquired during life rather than inherited from a parent.

Granuloma fungoides is not caused by a fungus, an allergy, or anything you have done. There is

no evidence that it can be passed through touching, sharing household items, sexual contact, or breathing the same air.

It is diagnosed more often in middle-aged and older adults, although younger adults and children can develop it. It is also reported more often in men than women. Some population studies have found differences in incidence, age at diagnosis, and outcomes between racial groups. The reasons may include a combination of biological, social, and health-care factors.

No single exposure or lifestyle factor has been shown to explain most cases.

## Diagnosis

Diagnosis usually begins with an examination of the whole skin surface. A clinician may ask when the patches appeared, whether they itch, how they have changed, and which treatments have already been tried. Lymph nodes may also be checked.

A skin biopsy is needed to confirm the diagnosis. During a biopsy, a small sample of skin is removed after the area is numbed. A specialist examines the tissue under a microscope.

Early changes can be subtle and may look similar to eczema or other inflammatory conditions. Several biopsies taken at different times or from different areas may be needed. This does not necessarily mean that the condition is rapidly changing; it may simply take time for a clear pattern to appear.

Laboratory testing may include:

If the diagnosis is confirmed, further tests help determine the stage. These may include blood tests, imaging, or a lymph node biopsy. Imaging is not always needed for limited patches without concerning examination findings.

Staging describes the type and extent of skin changes and whether lymph nodes, blood, or internal organs are involved. It is important because early skin-limited granuloma fungoides is managed differently from advanced lymphoma.

- Immunophenotyping , which identifies proteins on the abnormal T cells
- T-cell receptor testing , which looks for groups of T cells with matching genetic features
- Blood tests, including a blood cell count and tests for abnormal circulating cells

## Treatment and management

Treatment is tailored to the stage, symptoms, previous treatments, and your general health.

Early treatment often aims to control skin lesions, ease itching, and maintain long periods with little or no visible lymphoma.

For patches or limited plaques, skin-directed options may include corticosteroid like prednisone or hydrocortisone creams, medicated gels or ointments, phototherapy, or radiotherapy. Phototherapy uses carefully controlled ultraviolet light. Radiotherapy uses targeted radiation and may be helpful for one or a few persistent areas. Wider skin radiation is sometimes considered when lesions are extensive.

These treatments can clear visible lesions, but new areas may appear later. Regular skin examinations remain important even after a good response.

When the condition is widespread, has formed tumors, or involves blood, lymph nodes, or other organs, treatment may work throughout the body. Options can include retinoid medicines, interferon, targeted or immune-based medicines, extracorporeal photopheresis, or chemotherapy. Extracorporeal photopheresis removes some blood, treats its white cells with light-sensitive medicine and ultraviolet light, then returns the blood.

Treatment is often given in stages, starting with approaches that control the condition while limiting side effects. Chemotherapy may produce a response, but it is not automatically the best first option for skin-limited granuloma fungoides.

A stem cell transplant can provide long-term control and may cure selected people. It carries substantial risks and is usually considered only for suitable people with advanced or difficult-to-control lymphoma.

Supportive treatment also matters. Moisturisers, anti-itch measures, wound care, and treatment of skin infections can improve comfort and protect the skin barrier.

## Complications

Persistent itching can disturb sleep, concentration, and mood. Visible skin changes may also affect confidence, relationships, work, or social activities.

Plaques and tumors can crack or ulcerate. Damaged skin is more likely to develop bacterial infection. Signs can include increasing pain, warmth, swelling, pus, spreading redness, or fever.

In some people, abnormal cells spread to lymph nodes, blood, or internal organs. Another possible complication is large-cell transformation, in which the lymphoma cells change and begin behaving more aggressively. A rapidly growing lump, several new tumors, or a sudden change in established lesions should be assessed promptly.

Treatment can also have side effects. These differ between therapies and may include skin

irritation, increased sensitivity to sunlight, changes in blood counts, infections, tiredness, or effects on other organs. Monitoring is chosen according to the treatment being used.

## Prevention

Granuloma fungoides cannot currently be prevented. Its cause is not known, and there is no established screening test for people without symptoms.

You did not cause it through diet, personal hygiene, stress, or contact with another person. Family members do not usually need testing simply because you have been diagnosed.

If you are receiving phototherapy or medicines that make the skin sensitive to light, follow the skin-protection instructions given by your treatment team. This helps reduce treatment-related skin damage but does not prevent the underlying condition.

## Living with it and what to expect

The course differs from person to person. Many people diagnosed with patches or limited plaques have a slow-moving condition that remains confined to the skin for years. Treatment may clear or greatly improve lesions, but repeat courses are often needed when patches return.

Routine follow-up commonly includes examination of your skin and lymph nodes, review of symptoms, and blood tests when appropriate. Scans are usually guided by the stage or by new findings rather than performed at every visit.

It can help to notice changes in established patches and to report new lumps, sores that do not heal, or rapidly thickening areas. Photographs taken under similar lighting may help you track changes between appointments, but they cannot replace an examination or biopsy.

Most people with early-stage granuloma fungoides continue their usual work, relationships, and activities. Some need ongoing help with itching, sleep, clothing irritation, or the emotional effects of a visible skin condition.

Advanced granuloma fungoides is harder to control and can shorten life. Even then, several treatment categories may be available, and management may alternate between active treatment and periods of monitoring. No single timeline can predict what will happen for an individual person.

## When to get medical help

Arrange a routine medical appointment if you have a patch or rash that persists, repeatedly returns in the same place, slowly enlarges, or does not improve with usual treatment. Common skin conditions are much more likely, but persistent changes deserve assessment.

If you already have granuloma fungoides, contact your treatment team promptly about:

Seek urgent medical care for fever with painful, hot, swollen, or rapidly spreading skin redness, especially around an open lesion. These may be signs of a serious infection.

Call emergency services for severe breathing difficulty, fainting, confusion, or signs of a severe allergic reaction during or after treatment. Most day-to-day changes in granuloma fungoides are not emergencies and can be discussed during routine follow-up.

- A new or rapidly growing skin lump
- A sore or ulcer that does not heal
- New enlarged lymph nodes
- Widespread worsening redness or scaling
- New unexplained fevers, drenching night sweats, or weight loss
- Symptoms that are changing faster than usual

## Common questions

Is granuloma fungoides cancer?

Yes. It is a type of cutaneous T-cell lymphoma, meaning that abnormal immune cells mainly collect in the skin. Many early cases grow slowly, but it still requires specialist assessment and follow-up.

Is it a fungal infection?

No. The historical name "mycosis fungoides" sounds fungal, but no fungus causes the condition. Antifungal treatment does not treat the lymphoma unless a separate fungal infection is also present.

Is granuloma fungoides contagious?

No. You cannot pass it to another person through touch, sex, shared clothing, food, or household contact.

Can it spread beyond the skin?

It can, but many people with early patch-stage granuloma fungoides continue to have

skin-limited involvement. Spread is more likely with tumors, extensive skin involvement, abnormal blood findings, or affected lymph nodes.

Will the skin patches go away permanently?

Treatment can clear patches for months or years, but they may return or appear elsewhere. A return of skin lesions does not always mean that the condition has become advanced. New or changing areas should still be reviewed.

How long can someone live with granuloma fungoides?

Outlook is closely linked to stage. People with limited patches or plaques often live for many years and may have a life expectancy close to that expected for their age. Tumor-stage lymphoma or involvement of blood, lymph nodes, or organs has a less favourable outlook.

## Sources

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