CONDITION

Bullous pemphigoid

Learn about bullous pemphigoid symptoms, causes, diagnosis, treatment, skin care, complications, and when to seek urgent medical help.

WHAT IT IS
Autoimmune blistering skin condition

BODY SYSTEM
Skin

MAIN SYMPTOMS
Intense itching, red swollen patches, firm fluid-filled blisters, raw crusted areas

WHAT CAUSES IT
Autoimmune response, trigger often unclear

HOW IT IS DIAGNOSED
Skin biopsies with direct immunofluorescence

MAIN TREATMENT
Corticosteroids and immune-modifying medicines

CAN IT BE CURED?
No - treatment controls disease, relapses occur

IS IT AN EMERGENCY?
Sometimes - difficulty breathing or tongue or throat swelling

LONG-TERM OUTLOOK
Often lasts months or years and can relapse

Overview

Bullous pemphigoid is an autoimmune skin condition that causes itching, rashes, and fluid-filled blisters. "Autoimmune" means the immune system mistakenly attacks part of the body. In bullous pemphigoid, that attack weakens the connection between the outer layer of skin and the layer beneath it. Fluid can then collect in the space, creating blisters.

The blisters are usually tense or firm rather than soft and fragile. They may occur on otherwise normal-looking skin or on red, swollen areas that resemble hives or eczema. Bullous pemphigoid is not contagious and cannot spread through skin contact.

The condition mainly affects older adults, although it can occur at other ages. It often lasts for months or years, with periods when symptoms improve or return. Treatment can control inflammation, ease itching, prevent new blisters, and reduce the risk of infection.

Bullous pemphigoid matters because widespread itching and open skin can interfere with sleep, movement, nutrition, and daily care. Both the condition and some treatments can cause complications, especially in people with other medical problems. Care is often coordinated by a dermatologist, a doctor who specializes in skin conditions.

Symptoms

Intense itching is often the first symptom. It may begin weeks or months before obvious blisters appear. During this early phase, the skin may look normal or develop red, raised, or eczema-like patches. Some people initially have itching and inflammation without blisters.

When blisters develop, they are usually filled with clear fluid and feel firm. They may grow fairly large before breaking. Common locations include the lower abdomen, groin, armpits, inner thighs, and the bending surfaces of the arms and legs. The pattern varies, and large areas of skin may be affected.

Typical features include:

The mouth and other moist surfaces of the body can be involved, but this is less common than skin involvement. Mouth sores may make eating, drinking, or dental care uncomfortable. Eye, nose, throat, or genital symptoms should be reported promptly because they may need specialist assessment or suggest another blistering condition.

Symptoms can resemble allergic reactions, eczema, medication rashes, or other autoimmune blistering diseases. An examination and testing are needed to identify the cause.

- Persistent or severe itching
- Red, swollen patches that may resemble hives
- Firm, fluid-filled blisters
- Raw or crusted areas where blisters have opened
- Pain or tenderness in damaged skin
- Darker or lighter marks after inflammation heals

Causes and risk factors

Bullous pemphigoid develops when the immune system makes proteins called autoantibodies. These autoantibodies target structural proteins, especially BP180 and BP230, that help attach the outer skin layer to the tissue underneath. The resulting inflammation causes the layers to

separate and form blisters.

Why this immune response begins is often unclear. Bullous pemphigoid is generally not considered an inherited disease, and it is not caused by poor hygiene, diet, or contact with another person.

Older age is the strongest risk factor. Bullous pemphigoid has also been associated with neurologic conditions such as stroke, Parkinson disease, multiple sclerosis, epilepsy, and dementia. An association does not mean that one condition directly causes the other.

In some people, symptoms begin after exposure to a medicine. Medicines linked with bullous pemphigoid include certain diabetes drugs called dipeptidyl peptidase-4, or DPP-4, inhibitors. Immune checkpoint inhibitors used for cancer treatment and several other medicines have also been associated with the condition.

A medication link can be difficult to prove because bullous pemphigoid may start long after a medicine was introduced. Do not stop a prescribed medicine on your own. A doctor can review when each medicine was started, its benefits, and whether an alternative is appropriate.

Physical skin injury, surgery, radiation treatment, or ultraviolet light has occasionally been reported before localized disease. These events are not triggers for everyone and are not always avoidable.

Diagnosis

A dermatologist usually begins by asking when the itching and blisters started, which areas are involved, and whether any medicines have changed. The doctor may examine the skin, mouth, eyes, and other affected areas.

Skin biopsies are central to diagnosis. A biopsy removes a small sample after the area is numbed. Doctors commonly take one sample from a fresh blister or inflamed area to examine the skin layers under a microscope. A second sample may be taken from nearby skin for direct immunofluorescence. This laboratory test uses special dyes to look for immune proteins deposited in a line along the boundary between skin layers.

Blood tests may detect antibodies against BP180 or BP230. These tests can support the diagnosis and may sometimes help monitor disease activity, but they are interpreted together with the examination and biopsy results.

Other blood tests may check blood cell counts, liver function, kidney function, blood sugar, or infection risk before certain treatments. A swab or culture may be taken if an open area appears infected.

Testing also helps distinguish bullous pemphigoid from pemphigus, epidermolysis bullosa acquisita, dermatitis herpetiformis, severe medication reactions, and other causes of blistering.

Treatment and management

Treatment depends on how much skin is affected, symptom severity, other health conditions, and the person's ability to apply creams or manage dressings. The goal is to stop new blisters, heal existing areas, control itching, and use the lowest treatment intensity that keeps the disease under control.

Potent topical corticosteroids are a main treatment. These anti-inflammatory medicines are applied to affected skin. They can be highly effective, including for some people with extensive disease, but treating large areas may require help from a caregiver or nurse. Long-term or widespread use can thin the skin and may have effects elsewhere in the body, so follow-up is important.

Oral corticosteroids, such as prednisolone or prednisone, may be used when disease is widespread, progressing quickly, or difficult to treat with topical medicine. They often control inflammation promptly. Longer use can increase the risk of infection, high blood sugar, high blood pressure, bone loss, muscle weakness, mood changes, and eye problems. Doctors therefore try to reduce corticosteroid exposure when it is safe to do so.

Doxycycline, an antibiotic with anti-inflammatory effects, is an alternative for some patients. A major clinical trial found that it provided acceptable short-term blister control with fewer serious treatment-related problems than oral prednisolone, although initial blister control was better with prednisolone. The choice depends on disease severity and individual health factors.

Medicines that modify or suppress the immune response may be considered when corticosteroids like prednisone or hydrocortisone do not provide enough control or cause unacceptable effects. Options used in specialist care include methotrexate, azathioprine, and mycophenolate mofetil. Targeted treatments such as dupilumab, omalizumab, or rituximab may be considered in selected cases, particularly when standard approaches have not worked. Availability, regulatory approval, and insurance coverage differ by location.

These medicines require individualized risk assessment and, in many cases, blood-test monitoring. Treatment should not be started, stopped, or adjusted without the prescribing clinician.

Gentle skin care is also important. Washing with lukewarm water, using fragrance-free cleansers, and applying plain moisturizers may reduce irritation. Loose clothing can limit

rubbing. Open areas are usually protected with nonstick dressings. Adhesive tape should be kept off fragile skin when possible.

Blisters should not be deliberately opened without instructions from the care team. If one breaks, the remaining skin may protect the raw surface. Keep the area clean and follow the clinician's dressing plan. Antibiotics like amoxicillin or doxycycline are used when there is a bacterial infection, not simply because blisters are present.

Complications

Open blisters can become infected. Warning signs include increasing warmth, redness, swelling, pain, pus, an unpleasant odor, or fever. Contact a healthcare professional promptly if these develop. Early treatment may prevent a local infection from spreading.

Extensive skin damage can lead to fluid loss, difficulty staying warm, reduced mobility, and problems eating or drinking. Persistent itching may cause poor sleep, low mood, and scratching injuries. Healing may leave temporary changes in skin color, although deep scarring is not typical.

Treatment complications are also important. Corticosteroids and other immune-suppressing medicines can raise infection risk and affect blood sugar, bones, blood pressure, the liver, kidneys, or blood cell counts. Monitoring is intended to detect these problems early.

Seek urgent medical advice for rapidly increasing blisters, widespread painful or peeling skin, new eye symptoms, extensive mouth sores, inability to drink, or signs of infection.

Call emergency services for difficulty breathing, swelling of the tongue or throat, fainting, new confusion, severe weakness, or other signs of a life-threatening reaction or severe infection.

Follow up

Regular dermatology follow-up is needed while disease is active and while treatment is being reduced. At routine visits, the clinician may ask about new blisters, itching, wound healing, sleep, medication effects, and the practical challenges of skin care.

Blood tests may be required for people taking oral corticosteroids or immune-modifying medicines. The care team may also discuss blood pressure, blood sugar, bone health, eye care, vaccination, and ways to reduce infection risk. The exact monitoring plan depends on the treatment and other medical conditions.

Bullous pemphigoid can relapse after improving. A few new itchy spots or blisters may be an

early sign. Report a clear increase rather than changing treatment independently. Photographs and a simple record of new blisters can help the clinician assess whether the disease is becoming more active.

Routine follow-up is appropriate when symptoms are stable, wounds are healing, and no concerning medication effects are present. Earlier review is appropriate if itching suddenly worsens, new blisters appear regularly, dressings become difficult to manage, or treatment side effects interfere with daily life.

Sources

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