CONDITION

Hot tub folliculitis

Hot tub folliculitis is a temporary bacterial infection that causes itchy or tender spots around hair follicles after contaminated water exposure.

WHAT IT IS
Bacterial inflammation of hair follicles after warm-water exposure

BODY SYSTEM
Skin

MAIN SYMPTOMS
Itchy red bumps, pus-filled spots, tenderness, mild fever

WHAT CAUSES IT
Infection with Pseudomonas bacteria

HOW IT IS DIAGNOSED
Skin examination; bacterial culture when confirmation is needed

MAIN TREATMENT
Supportive skin care; antibiotics for severe or persistent cases

CAN IT BE CURED?
Yes - infection usually clears completely

IS IT AN EMERGENCY?
Sometimes - high fever with rapidly spreading redness

LONG-TERM OUTLOOK
Usually complete recovery within days to two weeks

Overview

Hot tub folliculitis is inflammation and infection of the hair follicles. Hair follicles are the small openings in your skin from which hairs grow.

The condition usually develops after bathing in water contaminated with Pseudomonas aeruginosa . This bacterium can survive in warm water, especially when disinfectant levels or water acidity are not properly controlled. Hot tubs are a common source, but the same condition can follow exposure to swimming pools, water slides, therapy pools or other shared water facilities.

The rash often appears in areas covered by a swimsuit because wet fabric holds contaminated water against the skin. The trunk, buttocks and upper thighs are common sites.

Most cases are mild and clear without specific medical treatment. Recognising the condition still matters because a persistent or worsening rash may need testing and treatment. People with weakened immune systems may also need medical advice sooner.

Symptoms

Symptoms usually begin within a few hours to several days after water exposure. Many people first notice the rash about one or two days later.

The main features include:

The spots may be scattered or appear in clusters. They commonly affect the chest, abdomen, back, buttocks and thighs. Areas where swimwear rubbed against the skin may be particularly affected.

Some people also feel mildly unwell. Possible symptoms include a low fever, tiredness, headache, sore throat or nausea. These general symptoms are usually brief.

The rash can resemble acne, insect bites or other forms of folliculitis. Its appearance alone does not prove that contaminated water was the cause.

- Groups of small red or darker bumps around hair follicles
- Itching, burning or tenderness
- Small spots containing white or yellow pus
- A rash that is worse beneath a swimsuit

Causes and risk factors

Hot tub folliculitis is usually caused by Pseudomonas aeruginosa . This is a type of bacterium found in soil and water. It grows well in warm, moist environments and can tolerate disinfectant better than some other bacteria.

Proper disinfection and water chemistry help control it. Problems can develop when a hot tub is not maintained correctly, when many people use it, or when warm water reduces the effectiveness of disinfectant.

You may be more likely to develop the condition after:

Anyone can develop hot tub folliculitis. People with eczema, damaged skin, diabetes or a weakened immune system may have a greater risk of complications from skin infections.

Hot tub folliculitis is not usually passed directly from one person to another. Several people

may develop it at the same time because they used the same contaminated water.

- Spending a long time in contaminated water
- Keeping a wet swimsuit on after leaving the water
- Wearing tight swimwear that traps water against the skin
- Shaving, waxing or otherwise irritating the skin shortly beforehand
- Using a poorly maintained private or public hot tub

Diagnosis

A healthcare professional can often identify hot tub folliculitis by examining the rash and asking about recent hot tub, pool or shared-water exposure. The timing of the rash and its concentration beneath swimwear provide useful clues.

Testing is not always needed when the symptoms are mild and the rash is already improving.

If the rash is severe, persistent or unusual, a sample may be taken from a pus-filled spot. A laboratory can grow the bacteria in a test called a culture. This confirms the organism and can show which antibiotics like amoxicillin or doxycycline are likely to work.

Other conditions can look similar. These include folliculitis caused by other bacteria or yeast, acne, contact dermatitis, heat rash and insect bites. Repeated episodes without a clear water exposure may require further assessment.

Blood tests are not usually needed. A skin biopsy, in which a very small skin sample is examined, is rarely necessary.

Treatment and management

Most mild cases improve on their own once there is no further contact with contaminated water. Antibiotics are not routinely needed.

While the skin heals, you can:

An over-the-counter anti-itch treatment may help some people, but ask a pharmacist or healthcare professional if you are unsure whether a product is suitable for you. Harsh scrubs and strongly scented skin products can make irritation worse.

Do not return to the hot tub that may have caused the rash until it has been properly cleaned, disinfected and maintained. If you became unwell after using a public facility, tell the operator. This may help prevent further cases.

A clinician may consider an antibiotic if the infection is severe, continues to worsen, does not clear as expected, or affects someone at higher risk of complications. Because Pseudomonas is resistant to many commonly used antibiotics, treatment may be chosen using the result of a bacterial culture. Do not use leftover antibiotics or someone else's medication.

- Wash gently with mild soap and water
- Apply a cool, damp cloth to itchy or uncomfortable areas
- Wear loose clothing to reduce rubbing
- Avoid scratching, squeezing or picking the spots
- Avoid shaving or waxing affected skin
- Wash swimwear before wearing it again

Complications

Complications are uncommon in otherwise healthy people.

Temporary darker or lighter marks can remain after the bumps settle. This is called post-inflammatory pigment change. It may be more noticeable in darker skin and can take longer to fade than the rash itself.

Scratching or squeezing the spots can damage the skin and allow another infection to develop. Occasionally, infection may spread into the surrounding skin, causing cellulitis. A deeper collection of pus, called an abscess, is also possible but not typical.

Scarring is unusual. It is more likely if inflammation is deep or the skin has been repeatedly picked.

Serious infection is rare, but the risk is higher in people whose immune systems are weakened by illness or treatment. These people should seek medical advice early rather than waiting for a widespread rash to settle by itself.

Prevention

There is no way to guarantee that every water exposure will be free of bacteria. Good hot tub maintenance and personal hygiene can reduce the risk.

After using a hot tub or pool, remove your swimsuit and shower with soap. Wash and dry the swimsuit before wearing it again. Do not remain in tight, wet swimwear for longer than necessary.

Avoid using water that looks cloudy, has a strong unpleasant smell, or appears poorly maintained. A strong chemical smell does not necessarily mean that the water is clean or that it contains enough effective disinfectant.

If you maintain a home hot tub, follow the manufacturer's and local public-health instructions for disinfectant levels, acidity, filtration and regular cleaning. Water should be tested at the recommended intervals. Hot tubs used by several people may need especially careful monitoring.

Try not to shave or wax immediately before hot tub use if this leaves your skin irritated. Covering open wounds with a suitable waterproof dressing may reduce exposure, although it cannot provide complete protection.

Living with it and what to expect

Hot tub folliculitis is usually short-lived rather than a chronic skin condition. New spots may appear for a short time after the rash begins, but most cases then start to settle over several days. Complete clearing may take up to about two weeks.

Itching and tenderness usually improve before every visible mark disappears. Flat red, brown or pale marks can remain after the active bumps have healed. These marks are not necessarily a sign that infection is still present.

The condition does not usually cause lasting damage or affect everyday health. You can generally continue school, work and usual activities if you feel well. Loose clothing may be more comfortable while the rash is active.

Avoid the suspected hot tub until its water system has been properly treated. It is also sensible to stay out of communal water while spots are open or draining.

Having hot tub folliculitis once does not provide reliable immunity. It can happen again after another exposure to contaminated water. Repeated rashes should be medically assessed, especially if they occur without hot tub or pool use.

When to get medical help

Arrange routine medical advice if the rash is not clearly improving after several days, remains after about two weeks, or keeps returning. You should also seek advice if you are unsure what caused it or if the spots become increasingly painful.

Contact a healthcare service promptly if you develop:

Seek emergency care for a rapidly worsening skin infection accompanied by a high fever, confusion, fainting, severe weakness or difficulty breathing. These symptoms are not typical of uncomplicated hot tub folliculitis and may indicate a serious infection or another urgent condition.

- Increasing redness, warmth or swelling around the rash
- A painful lump or a large amount of drainage
- Red streaks spreading away from the affected area
- Fever or worsening general illness
- A rash near the eyes or across a large area
- Symptoms while your immune system is weakened

Common questions

How long does hot tub folliculitis last?

Most cases begin improving within several days and clear within about one to two weeks. Pigment changes may remain visible for longer. A rash that continues to worsen or does not improve should be assessed.

Is hot tub folliculitis contagious?

It is not usually spread through ordinary contact with another person. Several people may become affected after sharing the same contaminated hot tub or pool.

Avoid sharing towels while the rash is active. Wash clothing and swimwear normally, and keep draining spots clean and covered.

Can I go back in the hot tub?

Do not use the hot tub thought to have caused the rash until it has been properly cleaned, disinfected and checked. Re-entering untreated water may lead to another exposure.

It is also best to avoid communal water while you have open or draining spots.

Do I need antibiotics?

Most mild cases do not need antibiotics. The rash often clears after exposure stops and the skin is kept clean and protected from irritation.

Antibiotics may be considered when symptoms are severe, persistent or spreading, or when there is a higher risk of complications. A culture can help guide the choice because many standard antibiotics do not treat Pseudomonas effectively.

Will the rash leave scars?

Permanent scarring is uncommon. Temporary darker, lighter or red marks may remain after the bumps heal. Avoiding scratching and squeezing reduces the chance of skin damage.

Is hot tub folliculitis the same as a chlorine rash?

No. Hot tub folliculitis is usually a bacterial infection involving hair follicles. A so-called chlorine rash is generally irritant contact dermatitis, meaning the skin has reacted to chemicals or other substances in the water.

Irritant dermatitis is often dry, itchy and patchy rather than made up of pus-filled spots centred on hair follicles. A clinician can help distinguish them when the cause is unclear.

Sources

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