



The Family Guide to Psoriasis

Recent developments in the treatment of psoriasis & helpful information for those living with psoriasis



New Treatments - New Hope

There is good news for Canadian psoriasis sufferers, with many new therapies coming to market, and other promising medications on the horizon.

With the assistance of Canadian dermatologists, we have prepared this guide for patients with psoriasis. Included you will find helpful information to better manage your disease.

This guide describes traditional treatments, as well as newer options that may offer hope for more effective therapy. There are also tips to help manage psoriasis; together with new treatments, these may help to decrease the suffering for all those who live with this condition. We hope that ongoing research into psoriasis will one day lead to a cure for this challenging disease.

Please remember that this guide is not meant to be a substitute for the advice given to you by your dermatologist or family physician. Be sure to let your doctor know if you have any concerns about your psoriasis or its treatment.

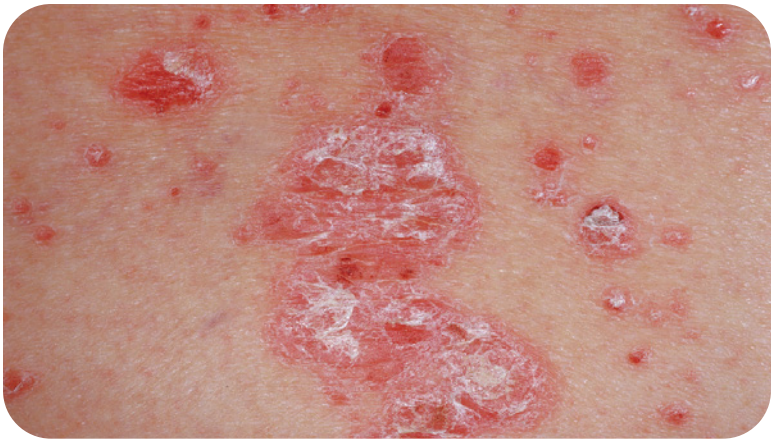


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What is psoriasis?

Psoriasis is a chronic (ongoing and often recurring) disease characterized by patches of red and usually scaly skin. Affecting about one million Canadians, psoriasis can range in severity and affect any part of the body. Psoriasis usually occurs on the scalp, elbows, knees, lower back, and genitals, often in the same place on both sides of the body. It can also appear in the fingernails or toenails.



Psoriasis usually begins in early adulthood but may develop at any age. It can heal temporarily but come back throughout a person's life. People with psoriasis may suffer discomfort, including pain, itching and often severe emotional distress.

Psoriasis is not contagious - it cannot be spread from one person to another or from one part of the body to another.

The most common type of psoriasis is called **plaque psoriasis**. Dermatologists may also refer to this as plaques: these are raised patches of thick, inflamed red skin covered with silvery-white flakes or scales.

What is psoriasis?

Symptoms and signs of psoriasis

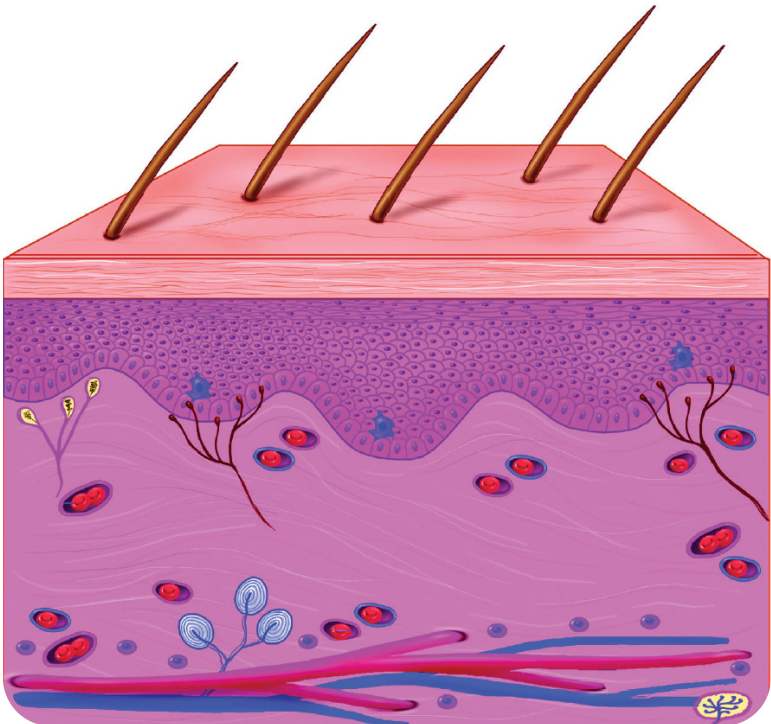
- Dry, cracked, red skin, often with raised plaques
- Itching
- Skin swelling
- Skin pain
- Pitted, cracked, crumbly or loose nails



What causes psoriasis?

While the exact cause of psoriasis is not known, current research suggests that a disorder in the body's immune system, the system that protects one's body from infection, may be involved in the development of psoriasis. In people with psoriasis, a malfunction of the immune system causes skin cells to reproduce faster than normal. Because of their rapid growth, the skin cells accumulate, forming the typical raised plaques of psoriasis.

For example, a normal skin cell grows to maturity in 28-30 days, and is then shed from the skin's surface. A psoriatic skin cell, on the other hand, takes only 3-4 days to mature. It then moves to the surface of the skin where it builds up with other cells, forming the thick scaly patches.



What causes psoriasis?



The role of the immune system

Psoriasis has been linked with abnormal functioning of the immune system. This means that the immune system that normally protects your body sends abnormal signals to the cells and tissues of your own body. These abnormal signals cause the skin cells to grow more quickly than normal.

The immune system is comprised of T-cells and other cells that help protect the body against disease and infection. It is believed that in psoriasis, abnormal activity of T-cells causes inflammation and excessive skin reproduction in the top layers of the skin. We don't know exactly what causes these T-cells to behave in this way, but we know that if we can stop their abnormal activity we can help to treat psoriasis.

Types of psoriasis

Plaque psoriasis is the most noticeable form of psoriasis. This appears as raised patches of thick, inflamed red skin with silvery flakes or scales.

Guttate psoriasis, the second most common type of psoriasis, is characterized by small, scaly, pink teardrop patches. It usually appears on the torso of the body, as well as the arms and legs, but can sometimes cover the entire body. Guttate psoriasis often appears suddenly following a common bacterial infection, such as strep throat.

Scalp psoriasis occurs when thick, crusted plaques occur on the scalp. It is most noticeable around the ears and hairline. Scalp psoriasis is difficult to treat because of the hair protecting the scalp. The flaking and shedding of dead skin cells give the appearance of severe dandruff.

Pustular psoriasis is characterized by small, pus-filled blisters that often occur on the hands and feet, or spread over large areas of the body. This type can be painful, can cause fever and may require antibiotic treatment.

Erythrodermic psoriasis, the least common form of psoriasis, is characterized by widespread reddening and scaling of the skin. It is often accompanied by painful inflammation and/or pain, and may require hospitalization.

This is not a complete list of all the different types of psoriasis, but rather some of the different varieties that do exist.

What can trigger psoriasis?

Many people with psoriasis may notice that their symptoms can get worse temporarily (a "flare-up"). Certain factors are thought to trigger a flare; however, psoriasis can flare without any clear cause.

Turn to page 15 for a useful tool to record possible triggers causing your psoriasis to flare-up. Share them with your dermatologist at your next appointment!

Possible causes of a flare-up may include:

Skin injury and irritation: Frequent rubbing and/or scratching of the skin can make psoriasis worse.

Climate: Moderate sun exposure can be very helpful, reducing the appearance of plaques. On the other hand, a hot, humid environment or overexposure to the sun can make psoriasis worse. In winter, your skin can dry out as a result of the lower humidity in the air and your psoriasis may worsen.

Diet: A healthy balanced diet is advisable for people with psoriasis, or any other disease. If you find certain foods cause flare-ups, note them and avoid these foods as much as possible. For example, excessive alcohol consumption is a notorious cause of flare-ups.

Stress: Stress and tension seem to make psoriasis worse. Try to avoid stressful situations as much as possible.

Medications: Some medications given for other reasons can make psoriasis worse. These medications include: common treatments for rheumatoid and osteo-arthritis (including some anti-inflammatory medications), anti-malarial treatments as well as certain beta-blockers used to treat high blood pressure. It is important to let your dermatologist know what medications you are taking.

Infections: Some throat and respiratory infections, particularly strep infections, can make psoriasis worse. This is most commonly seen in children and adolescents.

How is psoriasis treated?

There exists a wide range of treatment options available for relieving and controlling psoriasis.

A dermatologist will select a treatment plan based on the type of psoriasis, the affected skin areas, and the disease's effects on a patient's overall physical and emotional well-being. Treatment will also depend on the perception of the disease and the patient's preferences for treatment.

Treatment options are generally considered as being either suppressive or remittive. Suppressive treatments induce a response but symptoms may return soon after treatment is stopped. Remittive treatments induce a response that lasts for a significant period of time after treatment is stopped.

The best treatment is one agreed upon by both the patient and doctor after there is a full discussion of treatment options that fit your personal condition and lifestyle.

Moisturizers & psoriasis

Moisturizers can help reduce inflammation and itching, while making the skin much more comfortable. They also help reduce the chance of dryness, scaling, cracking and tenderness – symptoms often associated with psoriasis. Moisturizers (creams and ointments) can be applied over a topical medication or on its own.

Creams and ointments

Topical steroids (applied to the skin): Also called corticosteroids [kor-ti-ko-stair-oids], topical steroids can have a positive effect on psoriasis. Short-term use of steroids has proven to be effective, especially when psoriasis is inflamed or when it exists on delicate areas of the skin. Over-usage of steroids can result in the thinning or cracking of the skin, and sometimes even resistance to the medication.

Coal tar: One of the oldest therapies for psoriasis, coal tar is often used on small or large plaques. It can irritate unaffected skin, but this is usually temporary and mild. Coal tar, such as Balnetar® or Estar®, is suitable for plaques that are widespread across the body; however it is not generally recommended for delicate areas. Many patients find that coal tar has an unpleasant odor or that it stains their clothing.

Vitamin D derivatives: Products made from vitamin D3, such as Dovonex®, are used for mild to moderate psoriasis. This is not the same vitamin D found in commercial vitamin D supplements. It is a prescribed medication that effectively controls the excessive production of skin cells, improving symptoms with few side effects.

Vitamin A derivatives: May prove useful in the treatment of psoriasis. However, vitamin A derivatives, such as Tazorac®, can be irritating to the skin. These medications may be prescribed for stable plaque psoriasis.

Light therapy

Sunlight: Daily, regular short doses of sunlight that do not produce sunburn can be helpful in clearing or improving psoriasis. Ultraviolet (UV) radiation is made up of invisible rays the sun emits that can slow the overproduction of skin cells. However, it is the same UV light that can cause suntans, sunburns, and in some cases skin cancer. UV rays are also responsible for accelerated aging and wrinkles in the skin.



Light therapy

Phototherapy: Ultraviolet (UV) light from the sun reduces inflammation and slows the overproduction of skin cells that causes scaling. Phototherapy is a controlled form of artificial UV light that may be prescribed for the treatment of psoriasis. This treatment uses special wavelengths of ultraviolet lights either in the form of ultraviolet A (UVA) or ultraviolet B (UVB). This treatment is usually administered in a doctor's office or a psoriasis clinic.

PUVA: Long-wave ultraviolet light A (UVA) is used in combination with an oral or topical substance called psoralen to treat resistant psoriasis (PUVA = **P**soralen **U**ltra**V**iolet **A**). Making the skin more sensitive to UVA rays, psoralen promotes a deeper, more therapeutic effect. This treatment needs to be used with precaution and under the supervision of a dermatologist as it may be associated with the development of skin cancer.

UVB: This type of treatment involves exposing the skin to short-wave ultraviolet light B (UVB). By receiving properly controlled exposure, this is an effective and safe treatment for moderate to severe psoriasis. Psoriasis patients should be under the direction of a dermatologist when receiving any light therapy.

Systemic therapy

Some individuals develop widespread plaques that are not manageable by conventional topical treatment. Patients with moderate to severe psoriasis who are not effectively treated with topical therapies are considered for systemic medications (given by injection or by mouth (orally)). The most common medications are methotrexate, cyclosporine, and oral retinoids. Most systemic agents have been known to cause side effects, and discussing them with your dermatologist prior to treatment is advisable.

Methotrexate: A medication that was first used in chemotherapy, it may be prescribed for people with moderate to severe psoriasis who do not respond well to other forms of therapy. Although effective in the treatment of moderate to severe psoriasis, regular blood monitoring is essential because of its side effects.

Cyclosporine (Neoral® or Sandimmune®): May be prescribed for the treatment of moderate to severe psoriasis sufferers who do not respond well to other forms of therapy. Like other medications, cyclosporine is a medication that can have side effects, so regular monitoring is recommended.

Retinoids: Vitamin A derivatives, such as acitretin (Soriatane®), are effective when used in combination with light therapy - PUVA or UVB. Regular monitoring is important because of the possible side effects. Women who are planning a pregnancy or who are pregnant must consult their doctor before starting this treatment.

Biologic agents in psoriasis

Researchers now know that psoriasis is an immune-mediated disease involving T-cells. They are searching for ways to reduce these psoriasis-causing immune cells and stop the chemicals that the T-cells release. Biologic agents – usually used for people who have failed or cannot use traditional therapies (such as vitamin D derivatives and steroids or older, systemic therapies) or for people with associated psoriatic arthritis – use a specific, targeted approach to interrupt the underlying processes that drive psoriasis.

Generally there are three ways in which biologics work:

1. Block the activation of T-cells that cause psoriasis.
2. Systematically reduce the number of T-cells that cause psoriasis.
3. Inhibit the chemical messengers that trigger the overactive production of skin cells.

Availability of biologics for psoriasis

There are a number of biologic treatments that have been approved by Health Canada for the treatment of moderate to severe chronic plaque psoriasis including Amevive® (alefacept), Enbrel® (etanercept), Raptiva® (efalizumab) and Remicade® (infliximab). There are also other biologic therapies for psoriasis in various stages of development. One of the greatest prospects for biologic therapies is that they provide new options for patients with psoriasis.

With the advent of biologic medicines, there is additional hope that people with psoriasis will benefit from safe and effective treatments. Biologic therapy, in some cases, can provide extended breaks from taking medication. In fact, some biologics can offer a break from therapy while psoriasis remains in control.

There are more than 80 different biologics available in Canada today for the treatment of a variety of medical conditions, such as arthritis, cancer and kidney disease. The most commonly known biologic is insulin, which is used in the treatment of diabetes. Research into biologics originated in the mid 70's when scientist Herbert Boyer, at the University of Southern California, used his knowledge of the amino acid sequence of insulin to manufacture a genetic copy of insulin. By manipulating the gene responsible for the production of insulin, he was able to produce man-made insulin – a revolutionary discovery for the treatment of diabetes.

Biologics are also used in various vaccines.

For more information and news on biologics for the treatment of psoriasis visit www.psoriasisupport.ca.



You and your dermatologist

A dermatologist is an expert in the diagnosis and treatment of diseases of the skin, hair and nails and is the best source of information about psoriasis. Psoriasis is a difficult disease to have and it is also often difficult to treat. Developing a solid partnership of consultation and communication with your dermatologist will help you and your physician explore and decide on the best treatment.

Because the time that you have with your doctor may be limited, preparing questions in advance will help you remember the most important points that you want to cover.

Here are some questions you may want to ask:

1. What treatment would be right for me based on the severity of my psoriasis and how would this choice affect my lifestyle?
2. What are the key benefits of this treatment?
3. What are the possible short-term and long-term side effects?
4. Will I have to use this medication on a continuous or intermittent basis?
5. Is there a chance of my disease worsening or rebounding with this medication?

Resources

To learn more about psoriasis:

- Psoriasis Support Canada (www.psoriasisupport.ca)
- Canadian Dermatology Association (www.dermatology.ca)
- National Psoriasis Foundation (www.psoriasis.org)

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