

What is Psoriasis?

It is a genetically predetermined, immune mediated, long term inflammatory disease that primarily affects the skin and joint. Till date, more than 40 susceptible gene locations have been identified; the more prominent one being HLA cw-6 on PSOR-1 locus and CARD4.

Psoriasis patients commonly present with red/pink colored plaques of thickened, scaling skin. The plaques and thick scales are caused by rapid proliferation of skin cells triggered by inflammatory chemicals produced by specialized white blood cells name lymphocytes resulted from disorders in immune system beneath the skin. The same inflammatory chemicals can also attack the joints causing joint pain (arthritis) and deformity if left untreated.

Psoriasis is **NOT a contagious disease** and therefore it **does not spread from close contact and touching**. It is also **NOT cancerous**.

Who gets it?

Not all individuals who have susceptible gene will elicit the disease. The disease expression itself depends on the complex interaction between genetic and environmental factors. About 20% of Malaysian psoriasis patients have family members with psoriasis.

Risk and aggravating factors for getting psoriasis are

1. Positive family history of psoriasis
2. Alcohol consumption
3. Smoking
4. Obesity
5. Stressful life events
6. Infections
7. Injury / Trauma to skin in a susceptible person such as cuts, abrasions, sunburn
8. Excessive sun exposure in 10% (sun exposure is more often beneficial)
9. Medications (such as lithium, beta blockers, anti-malarials)
10. Stopping oral / injectable steroids

How common is Psoriasis?

Fairly common

About 1-3% of worldwide populations suffer from psoriasis. In Malaysia, patients with psoriasis account for 2-6% of yearly dermatology clinic new attendees according to a study published in Medical Journal of Malaysia.

Currently, there are more than 12,000 patients being registered with Malaysian Psoriasis Registry. We believe these figure is just ice of iceberg, a lot more of patient did not come forward for treatment or under-diagnosis.

Both men and women are equally affected. It can start at any age, with peaks of onset at 15–25 years and 50–60 years. Psoriasis disease tends to persist lifelong, fluctuating in extent and severity.

What are the different types of Psoriasis?

There are 5 subtype of psoriasis being identified (based on skin morphology).

The commonest type is Plaque Psoriasis seen in about 80-90% of all psoriasis patients. It typically presents with red/pink raised plaque with sharp outline, thick silvery scales and symmetrically distributed over trunk and limbs (see picture 1)



Picture 1

Other types of psoriasis include

- Guttate psoriasis (same plaque but much smaller in size with rain-drop like spots)
- Pustular psoriasis (small pus-filled yellowish blister surrounding psoriasis plaque)
- Inverse psoriasis (lesions at the folds area like arm pit, groin, buttocks and below the breasts)
- Erythrodermic psoriasis (most severe form of psoriasis, generalized skin redness, dryness and scaling involving more than 90% for body surface area).

There are also types of psoriasis which is limited to certain body parts. Scalp psoriasis (plaque only present over scalp, pic 2) and Palmoplantar psoriasis (only palms and soles are involved, pic 3) are examples of these limited variants and they are commonly misdiagnosed as other diseases like eczema or dandruff.



Pic 2: Scalp psoriasis



Pic 3: Palmoplantar psoriasis

What other body parts may be affected by psoriasis?

Psoriasis can also affect the joints and nails.

Joint involvement (psoriatic arthritis) can be debilitating to a patient as it causes a lot of pain and may lead to severe joint deformities (picture 4). Psoriatic arthritis may cause redness, swelling and pain to any joints, although the joints of the hands, knees and ankles tend to be most commonly affected.



Pic 4: Joint deformity in arthritis mutilans – one of the most severe form of psoriatic arthritis

Nail changes that may be seen in psoriasis include pitting over the nail plate, separation of nail plate from the nail bed and total nail dystrophy (pic 5) in worst case scenario. Nail involvement is typically very difficult to treat and is associated with increased risk of getting psoriatic arthritis.



Pic 5: Total nail dystrophy in psoriatic nail involvement

Why is it important to diagnose and treat psoriasis promptly and effectively?

Psoriasis is a visible disease, thus has significant negative impact on patients' quality of life. Psoriasis patients often experience difficulties like maladaptive coping responses, problems in body image, low self-esteem and also have feelings of stigma, shame and embarrassment regarding their appearance.

It has been linked to depression and suicidal tendencies in the patients. According to the oversea study published, as high as 10% of patients with psoriasis have contemplating of suicide.

Besides that, delay in diagnosis of psoriatic arthritis may lead to severe deformity and will significantly affect the active daily activities of psoriasis patients.

Furthermore, more and more recent studies have shown association of psoriasis with other medical conditions, including obesity, metabolic syndrome (Diabetes, hypertension, high cholesterol and lipid level in the blood), heart disease, inflammatory bowel disease (Crohn disease and ulcerative colitis), uveitis (inflammation of the eye). These complications can be reduced by controlling the psoriasis disease activity with effective treatment.

How do health care professionals diagnose psoriasis?

Most of the time, diagnosis is made clinically when typical plaques are noted from physical examination of the skin, further strengthened by information obtained from medical history and relevant family history.

If you have any skin lesions with features suggestive of psoriasis as above, make an appointment to see a dermatologist. Not all psoriasis-like lesions are caused by psoriasis. Your doctor will do further investigations to ascertain the diagnosis (<http://www.dermatology.org.my/dermatologist.htm>)

Lab test involving microscopic examination of a skin biopsy (skin sampling tissue) may be needed. The skin biopsy usually indicated for cases with atypical presentation or recalcitrant to treatment given.

What is the treatment for psoriasis?

Patients with psoriasis should ensure they are well informed about their skin condition and its treatment. There are benefits from not smoking/stop smoking, avoiding excessive alcohol and maintaining ideal weight.

Many effective treatment options are available for psoriasis. Mainstay of treatment choices are:

1) Topical (skin applied) treatment:

Treatment of choice for mild diseases, which the disease was only involve small areas of the body. Topical treatment comes in various forms like creams, ointments, lotions, sprays and shampoos. It can be quite effective and is relatively safe to use if applied correctly.

Types of topical medications include topical corticosteroids, topical vitamin D analogue, topical retinoids, moisturizers, topical coal tars (made from pine tar), topical immune modulators and anthralin.

2) Phototherapy (light therapy):

Used for more extensive disease in conjunction of topical treatment, phototherapy is administered by shining Ultra Violet (UV) light of certain wavelength at psoriasis plaque.

Types of phototherapy include PUVA, narrow band UVB and excimer laser. Phototherapy is relatively safe and effective. However, they are only available in certain major public hospitals in Malaysia.

Furthermore, patients need to come to the hospital at least twice weekly for 3-6 months duration if they are subject to phototherapy. Therefore, logistic problem and availability of service may limit the usage of phototherapy.



Pic 6: patient receiving UV light in a phototherapy chamber.

3) Systemic therapy (oral medication, injection)

Systemic therapy is indicated for more severe diseases and patients with joint involvement to prevent permanent joint destruction. Systemic therapy is generally more potent and effective but it is also associated with more side effects and toxicities. Frequent blood investigations may be needed if patients were put on systemic therapy.

Examples of oral medications commonly used to treat psoriasis are methotrexate, acitretin and cyclosporine. Injection form of psoriasis treatment includes methotrexate and biologics.

Biologics are bioengineered protein designed to block specific molecular steps important in the genesis of psoriasis. They are one of the more advanced treatment modalities which are more effective as compared to conventional therapies. Biologics are only indicated if patients have failed or intolerance to all conventional therapies. Unclear long term potentially serious

side effects and cost (RM40k to RM 60k are needed annually, depending on types of biologics) remains the biggest stumbling block for biologics treatment.

Overall, the best treatment for psoriasis is individually determined by the treating physicians. It will depend on type of disease, severity, patients' preferences, availability of the treatment modalities and co-morbidities of patient.

Is the disease curable or preventable?

Unfortunately, up to date psoriasis is not curable or preventable.

However, it can be effectively controlled with current modern treatment. Ongoing researches are still being actively carried out to decipher the ultimate underlying cause and hopefully to discover a cure for this disease.

World Psoriasis Day

World Psoriasis Day (29 October) is an annual day specially dedicated to people with psoriasis/psoriatic arthritis. Conceived by patients for patients, World Psoriasis Day is a truly global event that sets out to give an international voice to the 125 million people with psoriasis/psoriatic arthritis.

On November 7 2015 (Saturday) Persatuan Penyayang Pesakit Psoriasis Pulau Pinang (PPPPPP), Persatuan Psoriasis Kedah (PPK), Persatuan Dermatologi Malaysia (PDM), Department of Dermatology, Hospital Pulau Pinang, Hospital Sultanah Bahiyah, Kedah and Hospital Raja Permaisuri Bainun, Ipoh will organizing "**Skin Health Day in conjunction with World Psoriasis Day 2015 (Northern Malaysia)**" at **Padang Polo, Georgetown Penang (7am-2pm)** to raise awareness and knowledge about basic skin care and common skin disorders in particularly psoriasis/psoriatic arthritis and give people with psoriasis the attention and consideration they deserve. Details about the event can refer to <https://www.facebook.com/skinhealthday2015>



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