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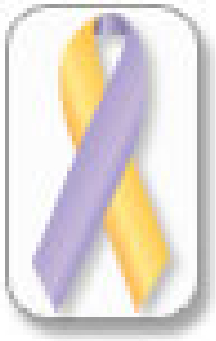
Key Inforbits

- Introduction to Psoriasis
- Diagnosis of Psoriasis
- Types of Psoriasis
- Management of Psoriasis
- Living with Psoriasis
- Recent Developments

World Psoriasis Day is October 29

Introduction to Psoriasis

What is Psoriasis?
Psoriasis is a chronic-inflammatory, or autoimmune, disorder which largely affects the skin and joints. Plaque psoriasis, also known as *psoriasis vulvaris*, is the most common form of psoriasis; it is seen in approximately 90% of psoriasis cases. Other, less common, forms of psoriasis include the following: Inverse psoriasis, erythrodermic psoriasis, pustular psoriasis, guttate psoriasis, psoriatic onychodystrophy, and psoriatic arthritis.[1-3]



What are the signs and symptoms psoriasis?
Patients typically present with areas of the skin that are thick, dry, red, and usually flat and covered with silvery white scales. These rashes may appear on the scalp, genitals, or in the skin folds. Additional symptoms may include nail changes that cause fingernails or toenails to appear pitted, crumbly or a different color.[2]

How prevalent is psoriasis, and who is likely to be affected by it?
The CDC estimates that psoriasis affects approximately 2% of the population; males and females equally. Typical onset is before the age of 40 in approximately 75% of cases, but psoriasis has been observed during earlier and later stages of life.[1,3]

What causes psoriasis?
Psoriasis is believed to be caused by a combination of genetic and environmental influences. Genetic predisposition, together with a triggering factor, causes an abnormal immune response, resulting in the initial psoriatic skin lesions. These environmental triggers may include: Injury to the skin, infection, drugs, smoking, alcohol consumption, obesity, and psychogenic stress.[1]

Are there serious complications associated with psoriasis?
It has been well documented that psoriasis patients have significant associated comorbid conditions.[1] These comorbid conditions may include autoimmune diseases such as inflammatory bowel disease (Crohn's disease), multiple sclerosis, components of the metabolic syndrome such as diabetes, cardiovascular disease, lymphoma, and psychological illnesses such as anxiety, depression, and alcoholism.[1,4]

What is the prognosis of patients with psoriasis?

Psoriasis is a chronic disease that fluctuates in severity during a patient's lifetime; the symptoms may be improved with therapy. Living with psoriasis can affect many aspects of your daily life, and can sometimes have an impact on your overall physical and emotional health. [1]

1. Law RM, Gulliver WP. Psoriasis. Chapter 78. In: DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM, editors. Pharmacotherapy: A pathophysiologic approach. 9th ed. New York: McGraw-Hill Medical; 2014. p. 1579-1591
2. Feldman SR. Patient information: Psoriasis (The Basics). In: UpToDate [Univ Of Alabama Hosp, Lister Hill Library online]. Philadelphia, PA: Wolters Kluwer Health. [updated 2014 March; cited 2014 Sep 25]. [about 10p.] Available from: http://www.uptodate.com/contents/psoriasis-the-basics
3. CDC: Psoriasis [Internet]. Atlanta: Centers for Disease Control and Prevention; 2013 Feb 11 [cited 2014 Sep 25]; [about 4 screens]. Available from: http://www.cdc.gov/psoriasis/
4. Alan M, Gottlieb A, Feldman SR, Van Voorhees AS, Leonardi CL, Gordon KB, Lebwohl M, Koo JYM, Elmets CA, Korman NJ, Beutner KR, Bhushan R. Guidelines of care for the management of psoriasis and psoriatic arthritis: section 1. overview of psoriasis and guidelines of care for the treatment of psoriasis with biologics. J Am acad dermatol. 2008;58 (5):826-850.

DIAGNOSIS OF PSORIASIS

How is psoriasis diagnosed?

There are no laboratory tests to confirm or rule out diagnosis of psoriasis. Diagnosis is typically made using patient history and physical examination. A skin biopsy may be performed to rule out other conditions.[1]

1. Feldman SR. Epidemiology, clinical manifestations, and diagnosis of psoriasis. In: UpToDate [Univ Of Alabama Hosp, Lister Hill Library online]. Philadelphia, PA: Wolters Kluwer Health. [updated 2014 August; cited 2014 Sep 26]. [about 29p.] Available from: http://www.uptodate.com/contents/epidemiology-clinical-manifestations-and-diagnosis-of-psoriasis

TYPES OF PSORIASIS

Table 1

Type of Psoriasis	Description
Plaque	Most common form presenting as raised, red patches that are itchy and painful. Patches most commonly form on knees, elbows, scalp, and lower back.
Flexural and/or intertriginous	Presents as red, smooth lesions in body folds
Seborrheic	Psoriasis occurring simultaneously with seborrheic dermatitis. Lesions commonly form on scalp, chest, and face.
Scalp	Lesions commonly form on the back of the head but the entire scalp may be affected.
Acrodermatitis of Hallopeau	Pustules form on tips of fingers and toes. The pustules rupture forming painful, red areas where new pustules may form.
Palmoplantar pustulosis	Clusters of pustules form on hands and feet.
Erythrodermic	Rare form of psoriasis presenting as a widespread, bright red rash causing severe itching and pain.
Guttate	The 2nd most common form of psoriasis presenting as multiple, small, red spots on the trunk and extremities.
Generalized pustular psoriasis	Pustules filled with white pus form in certain areas on the body or can be widespread.

National Psoriasis Foundation [Internet]. Portland: c1996-2014. Types of Psoriasis; [cited 2014 Sept 26]; [about 9 screens]. Available from: http://www.psoriasis.org/about-psoriasis/types

MANAGEMENT OF PSORIASIS

Non-Pharmacological Treatment

- Stress reduction techniques
- Oatmeal baths
- Moisturizing the skin reduces shedding, scaling, and pruritus. Choose options that are hypoallergenic and do not contain ingredients that irritate the skin.
- It's important to avoid prolonged direct sunlight because sunburn may cause an outbreak. If you choose to spend any significant time outdoors, wear sunscreen.

Pharmacological Treatment

- Patients with mild to moderate psoriasis should start using topical agents. However for patients with widespread or moderate to severe disease, phototherapy or systemic agents are recommended to be used, sometimes in combination with topical therapy.

Mild to Moderate

Topical Agents	
Corticosteroids	Initially patients are given a middle potency corticosteroid, such as hydrocortisone, which will reduce the severity and size of scales and plaques. Patients with thicker and longer lasting plaques tend to respond better to higher potency corticosteroids like betamethasone. Use low potency corticosteroids on the sensitive areas such as the skin and groin.
Vitamin D analogues	Calcipotriol and calcitriol are effective for managing psoriasis; however the best results are shown when it is given in combination with corticosteroids.
Topical Retinoids	Tazarotene has been shown to be highly effective in reducing the plaque elevation but it takes several weeks to start working. When it's given in combination with corticosteroids provides the best results.
Calcineurin inhibitors	Topical tacrolimus and pimecrolimus are effective options for the treatment of psoriasis and are preferred to be used for facial or sensitive areas. Their use may allow management of psoriasis without chronic corticosteroid therapy.

Light Therapy	
Wide band UVB	This treatment is used in patients with extensive disease, alone or in combination with topical tar.
Narrow band UVB	A useful alternative that is more effective than wide band UVB to clear plaque formation.
Photochemotherapy (PUVA)	Patients ingest the photosensitizing drug, 8-methoxypsoralen, followed within two hours UVA light therapy. It's an alternative aggressive treatment option that shows equal effectiveness as narrow band UVB.

Moderate to severe

Alternative agents	
Folic acid antagonist	***Methotrexate** Oral medication 7.5-25 mg once weekly, is an effective and safe medication for long term therapy.
Oral Retinoids	***Acitretin** Oral medication that when taking 25 to 50 mg daily is useful in severe presentations of psoriasis, it may be used in conjunction with phototherapy.
Systemic calcineurin inhibitor	***Cyclosporine** An effective medication for treating severe psoriasis at a dose of 3-5 mg/kg daily in which improvement will be seen at 4 weeks. Dose may be increased by 0.5 mg/kg depending on response.

Biologic agents	**Humira® (adalimumab)**: 80 mg SubQ during 1st week, the 40 mg next week, then 40 mg every other week continuously. **Amevive® (alefacept)**: 15 mg IM weekly over 12 weeks, then only when uncontrolled. **Enbrel® (etanercept)**: continuously given as 50 mg SubQ twice weekly for first 12 weeks, then 25 mg twice weekly or 50 mg once weekly **Remicade® (infliximab):** 3 IV infusions of 5 mg/kg given over a 6 week induction period, the regular infusions every 8 weeks **Stelara® (ustekinumab)**: 45 mg at baseline, 4 weeks, and every 12 weeks in those < 100 kg, and 90 mg at same intervals if > 100 kg.

Feldman SR. Treatment of psoriasis. In: UpToDate [Univ Of Alabama Hosp, Lister Hill Library online]. Philadelphia, PA: Wolters Kluwer Health. [updated 2014 July; cited 2014 Sep 25]. [about 29p.] Available from: http://www.uptodate.com/contents/treatment-of-psoriasis

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American Academy of Dermatology Work Group, Menter A, Korman NJ, et al. Guidelines of care for the management of psoriasis and psoriatic arthritis: section 6. Guidelines of care for the treatment of psoriasis and psoriatic arthritis: case-based presentations and evidence-based conclusions. J Am Acad Dermatol 2011; 65:137.

DIET

According to the National Psoriasis Foundation, patients who are overweight are more likely to experience more severe symptoms of psoriasis. It may be helpful for patients to keep a food diary because some foods have been found to aggravate their own symptoms. While, studies have not shown that a certain diet will decrease symptoms of psoriasis some patients have seen a reduction in skin inflammation by eating a healthy diet with lots of fruits and vegetables

National Psoriasis Foundation [Internet]. Portland: c1996-2014. Diet and Nutrition; [cited 2014 Sept 26]; [about 9 screens]. Available from: http://www.psoriasis.org/

STRESS

Stress is a common psoriasis trigger which can be hard to avoid because having psoriasis can be stressful. It is important to recognize events and stressors that occur during your daily routine and determine the best ways to manage your stress and psoriasis.

FUTURE RESEARCH

- Apremilast is a phosphodiesterase 4 inhibitor, may be a promising agent for the treatment of moderate to severe psoriasis which was approved in September 2014.
- Secukinumab is a new biologic agent which is still in development that will decrease the immune response in severe psoriasis through its action on interleukin.

Feldman SR. Treatment of psoriasis. In: UpToDate [Univ Of Alabama Hosp, Lister Hill Library online]. Philadelphia, PA: Wolters Kluwer Health. [updated 2014 July; cited 2014 Sep 25]. [about 29p.] Available from: http://www.uptodate.com/contents/treatment-of-psoriasis

The last "dose" …

Happiness is nothing more than good health and a bad memory –
Albert Schweitzer [German/French physician, theologian, missionary, 1875 to 1965]

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