TORONTO DERMATOLOGY CENTRE
Medical, Cosmetic & Laser

Skin Sense

Psoriasis

Dr. Benjamin Barankin & Dr. Anatoli Freiman

Psoriasis Overview

Psoriasis is a chronic, recurring inflammatory disease that can affect the skin, scalp, nails and joints. The typical lesions are itchy, erythematous, well-demarcated plaques with silvery-white scales. Psoriasis affects 2-3% of the population and ranges in severity from mild to severe. It affects men and women equally. The age of onset of psoriasis follows a bimodal distribution, peaking between ages 20 to 30 years and between 50 to 60 years.

The etiology of psoriasis is multifactorial and includes genetic component, HLA associations and a cytokine inflammatory cascade. Several environmental factors can trigger psoriasis in susceptible individuals: infections (most commonly streptococcal infection), trauma to the skin (surgery, sunburn, scratching; known as "Koebner phenomenon"), drug reactions (e.g., lithium, beta blockers, anti-malarial drugs, non-steroidal anti-inflammatory drugs, and glucocorticoids), and stress.

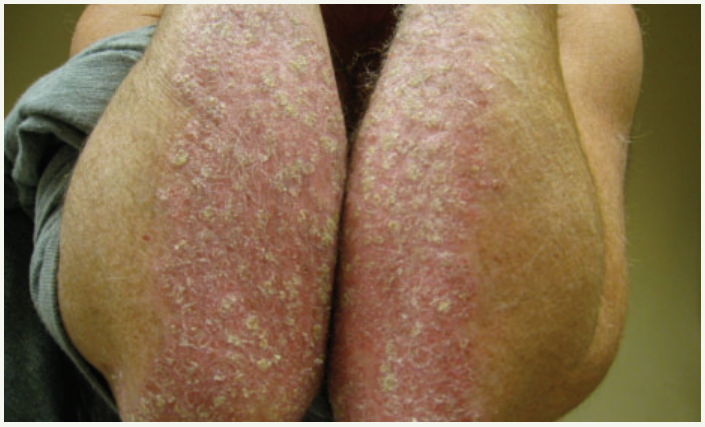
Clinical Presentation

The clinical presentation of psoriasis varies depending on the morphologic subclass. Plaque psoriasis is the most common subtype and is usually concentrated on the extensor surfaces (i.e., elbows, knees, and lumbar back), scalp, genital areas, palms, and soles. Scratching off the scale causes sites of punctate bleeding (Auspitz sign). Other forms of psoriasis include guttate psoriasis (often triggered by streptococcal pharyngitis), pustular psoriasis, erythrodermic psoriasis, and inverse psoriasis. An assessment of psoriasis severity should account for the extent and symptoms of disease and its effects on patient's life.

Diagnosis of psoriasis is mainly clinical – well-defined, symmetrical and in a characteristic distribution, erythematous, often pruritic plaques with silvery scale throughout. Skin biopsy can be helpful in difficult cases. Common differential diagnosis includes eczema, seborrhea, tinea, lichen planus, Bowen's disease, and pityriasis rosea.

Comorbidities

It is important to consider and potentially screen for co-morbidities in patients with psoriasis. Up to 25% of psoriatic patients will develop associated psoriatic arthritis, most commonly



of the small joints of the hands and feet and often after 10 years or more of having the skin findings. More recently, a higher prevalence of metabolic syndrome, cardiovascular disease and stroke has been described in those with psoriasis. Psoriasis has also been associated with depression, anxiety, sexual impairment, social stigmatization, and reduced work productivity.

Management

Management of psoriasis is a clinical art and often a challenge and depends on the affected body areas and comorbidities. Patients are typically looking for fast, effective and easily used therapy. It's important at the outset to select an effective treatment that the patient will be likely compliant with. There is a recently published evidence-based Canadian guideline for the management of plaque psoriasis.

Non-pharmacological management of psoriasis includes using moisturisers to help restore the skin's natural barrier and recognition and avoidance of triggers, such as physical trauma, cold weather, alcohol consumption, emotional stress and streptococcal throat infection.

Topical corticosteroids remain the mainstay of topical treatment for psoriasis. They reduce inflammation and the itch of psoriasis. In choosing appropriate corticosteroid potency and its vehicle, redness and thickness of plaque, impact on patient's

Toronto Dermatology Centre
Dr. Anatoli Freiman & Dr. Benjamin Barankin
www.torontodermatologycentre.com

4256 Bathurst St, # 400, Toronto, ON, M3H5Y8
Tel: (416) 633-0001 • Fax: (416) 633-0002
Patients seen within 1-2 weeks of referral

TORONTO DERMATOLOGY CENTRE
Medical, Cosmetic & Laser

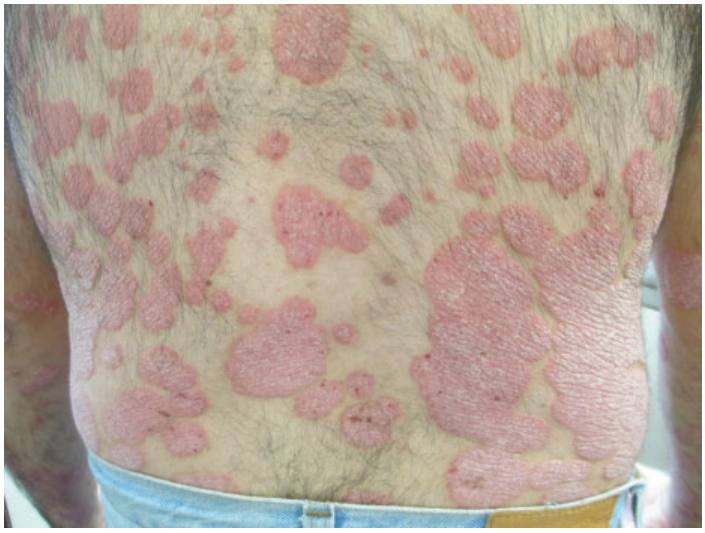
Skin Sense

quality of life, location being treated, and patient preference should be considered. Psoriatic patients often require treatment with the highest potency corticosteroids, such as clobetasol propionate, betamethasone dipropionate or halobetasol propionate. Clobex is one of the most widely used clobetasol formulations with three delivery modalities - spray, lotion and shampoo. Clobex Spray just recently came out with a new rotating directional nozzle, convenient for patients with psoriasis on their body and scalp. Use of the spray is associated with high compliance and often better outcomes as it's not greasy, dries quickly, and the onset of action is fast. There is no generic of the spray, and it is safe and effective for use up to 4 weeks at a time.

Topical vitamin D products reduce keratinocyte proliferation and induces keratinocyte differentiation in psoriasis. Silkis (calcitriol ointment) and Dovonex (calcipotriol ointment and cream) and are synthetic topical vitamin D analogs with a good safety profile and thus good options as maintenance therapy and in sensitive or thin-skinned areas. Dovobet is a combination product of calcipotriol and betamethasone dipropionate and can be used as an ointment formulation for body psoriasis and gel formulation for the scalp. **Topical immunomodulators** Protopic (tacrolimus ointment 0.03% and 0.1%) and Elidel (pimecrolimus cream 1.0%) can be used for psoriasis on sensitive body areas, such as the face, axillae and groin. **Tar and salicylic acid** preparations are effective to reduce the thickness of hyper-keratotic plaques, and intralesional steroids can be used for stubborn localized psoriasis lesions.

Phototherapy is an effective treatment modality, especially for widespread psoriasis. Narrow-band (311 nm) ultraviolet-B therapy is the most commonly used option. It is covered by OHIP and is available at the Toronto Dermatology Centre. Patients typically come in 2-3 times per week for just a few minutes for a duration of 2-3 months, with significant improvement and potential remission.

For the management of moderate to severe psoriasis, or psoriasis with systemic involvement, such as psoriatic arthritis, **systemic or biologic** therapy is often needed and referral to a dermatologist should be considered. Traditional agents include methotrexate, acitetrin, and less commonly cyclosporine. Biologic therapies are more targeted to psoriasis immunopathogenesis and are widely used by dermatologists. Current biologics on the market for psoriasis include Enbrel (etanercept), Humira (adalumumab), Stelara (ustikinemab), and Remicade (infliximab). They have a good combination of safety and efficacy backed by decades of



research and can greatly improve the patients' quality of life. Though costly, these therapies are typically covered by private drug plans and are also under formulary (ODB) for certain patients. Psoriasis is a very active area of research with many ongoing clinical trials including at Toronto Dermatology Centre; this is a great option to consider particularly in the patient without private drug coverage.

Psoriasis clinic is active at the Toronto Dermatology Centre, focusing on the treatment of psoriasis. Referrals can be faxed to (416) 633-0002 and patients will typically be seen within 1-2 weeks. For patients who have delays or difficulty accessing dermatology services, they can be referred via teledermatology; contact info@torontodermatologycentre.com for more information.

Toronto Dermatology Centre specialty clinics:

- *Psoriasis clinic*
- *Warts & molluscum clinic*
- *Skin cancer clinic*
- *Acne & rosacea clinic*

Toronto Dermatology Centre
Dr. Anatoli Freiman & Dr. Benjamin Barankin
www.torontodermatologycentre.com

4256 Bathurst St, # 400, Toronto, ON, M3H5Y8
Tel: (416) 633-0001 • Fax: (416) 633-0002
Patients seen within 1-2 weeks of referral