

## **Psoriasis:**

Psoriasis is a complex, chronic, multifactorial, inflammatory disease that involves hyperproliferation of the keratinocytes in the epidermis, with an increase in the epidermal cell turnover rate.

Environmental, genetic, and immunologic factors appear to play a role. The disease most commonly manifests on the skin of the elbows, knees, scalp, lumbosacral areas, intergluteal clefts, and glans penis. In up to 30% of patients, the joints are also affected. Treatment is based on surface areas of involvement, body site(s) affected, the presence or absence of arthritis, and the thickness of the plaques and scale.

## **Signs and symptoms**

Signs and symptoms of psoriasis may include the following:

- Worsening of a long-term erythematous scaly area
- Sudden onset of many small areas of scaly redness
- Recent streptococcal throat infection, viral infection, immunization, use of antimalarial drug, or trauma
- Pain (especially in erythrodermic psoriasis and in some cases of traumatized plaques or in the joints affected by psoriatic arthritis)
- Pruritus (especially in eruptive, guttate psoriasis)
- Afebrile (except in pustular or erythrodermic psoriasis, in which the patient may have high fever)
- Dystrophic nails ,which may resemble onychomycosis
- Long-term, steroid-responsive rash with recent presentation of joint pain
- Joint pain (psoriatic arthritis) without any visible skin findings
- Conjunctivitis or blepharitis

## **Diagnosis**

The diagnosis of psoriasis is clinical, and the type of psoriasis present affects the physical examination findings.

### *Types of psoriasis*

Common types of psoriasis include the following:

- Chronic stationary psoriasis (psoriasis vulgaris): Most common type of psoriasis; involves the scalp, extensor surfaces, genitals, umbilicus, and lumbosacral and retroauricular regions
- Plaque psoriasis: Most commonly affects the extensor surfaces of the knees, elbows, scalp, and trunk
- Guttate psoriasis: Presents predominantly on the trunk; frequently appears suddenly, 2-3 weeks after an upper respiratory tract infection with group A beta-hemolytic streptococci; this variant is more likely to itch, sometimes severely

- Inverse psoriasis: Occurs on the flexural surfaces, armpit, and groin; under the breast; and in the skin folds; this is often misdiagnosed as a fungal infection
- Pustular psoriasis: Presents on the palms and soles or diffusely over the body
- Erythrodermic psoriasis: Typically encompasses nearly the entire body surface area with red skin and a diffuse, fine, peeling scale
- Scalp psoriasis: Affects approximately 50% of patients
- Nail psoriasis: May be indistinguishable from, and more prone to developing, onychomycosis
- [Psoriatic arthritis](#): Affects approximately 10-30% of those with skin symptoms; usually in the hands and feet and, occasionally, the large joints
- Oral psoriasis: May present as severe cheilosis, with extension onto the surrounding skin, crossing the vermilion border
- Eruptive psoriasis: Involves the upper trunk and upper extremities; most often seen in younger patients

Examination in patients with psoriasis includes the following:

- Dermatologic: Most commonly, scaling erythematous macules, papules, and plaques; area of skin involvement varies with the form of psoriasis
- Ocular: Ectropion and trichiasis, conjunctivitis and conjunctival hyperemia, and corneal dryness with punctate keratitis and corneal melt [\[1\]](#); blepharitis
- Musculoskeletal: Stiffness, pain, throbbing, swelling, or tenderness of the joints; distal joints most often affected (eg, fingers, toes, wrists, knees, ankles); may progress to a severe and mutilating arthritis of the hands, especially if treatment has been suboptimal

## Management

### *Pharmacotherapy*

Medications used in the management of psoriasis include the following:

- Topical corticosteroids (eg, triamcinolone acetonide 0.025-0.1% cream, betamethasone 0.025-0.1% cream)
- Ophthalmic corticosteroids (eg, prednisolone acetate 1% ophthalmic, dexamethasone ophthalmic)
- Intramuscular corticosteroids (eg, triamcinolone): Requires caution because the patient may have a significant flare as the medication wears off
- Intralesional corticosteroids: May be useful for resistant plaques and for the treatment of psoriatic nails
- Coal tar 0.5-33%
- Keratolytic agents (eg, anthralin, urea): Use of these medications may facilitate more direct steroid contact with the skin
- Vitamin D analogs (eg, calcitriol ointment, calcipotriene, calcipotriene and betamethasone topical ointment)
- Topical retinoids (eg, tazarotene aqueous gel and cream 0.05% and 0.1%)

- Antimetabolites (eg, methotrexate)
- Immunomodulators (eg, tacrolimus topical 0.1%, cyclosporine, alefacept, ustekinumab)
- TNF inhibitors (eg, infliximab, etanercept, adalimumab)
- Phosphodiesterase-4 inhibitors (eg, apremilast)
- Systemic antipsoriatic agent (eg, ustekinumab)
- Artificial tears

The American Academy of Dermatology (AAD) guidelines recommend treatment with methotrexate, cyclosporine, and acitretin, with consideration of contraindications and drug interactions.<sup>[2]</sup>

A 2013 international consensus report on treatment optimization and transitioning for moderate-to-severe plaque psoriasis include the following recommendations<sup>[3]</sup>:

- Methotrexate, for as long as it remains effective and well-tolerated
- Cyclosporine, generally used intermittently for inducing a clinical response with one or several courses over a 3 to 6 months
- Transition from conventional systemic therapy to a biologic agent, either directly or with an overlap if transitioning is needed due to lack of efficacy, or with a treatment-free interval if transitioning is needed for safety reasons
- Combination therapy
- Continuous therapy for patients receiving biologic agents
- Switching biologic agents: If due to lack of efficacy, perform without a washout period; if for safety reasons, a treatment-free interval may be required
- Combinations of multiple agents (eg, methotrexate and a biologic) are necessary in some patients but the long-term safety and optimal laboratory monitoring have yet to be defined

### *Other therapies*

Management of psoriasis may also involve the following nondrug therapies:

- Light therapy with solar or ultraviolet radiation
- Stress reduction
- Biofeedback
- Climatotherapy
- Adjuncts, such as sunshine, sea bathing, moisturizers, oatmeal baths
- Punctal occlusion (and ocular lubricants): For keratoconjunctivitis sicca
- Bandage contact lens: To retard corneal melting