

Psoriasis

Psoriasis is an autoimmune chronic skin disorder characterized by well-circumscribed salmon colored plaques with silvery scale. These plaques often favor the extensor surfaces of the body including the knees and elbows. Patients with psoriasis will have a positive Auspitz Sign, which is pinpoint bleeding upon scraping off a psoriatic scale. On histologic evaluation, the epidermis is thickened and there are nucleated cells found in the stratum corneum. Collections of neutrophils are also seen in the stratum corneum, termed Munro microabscesses. Treatment largely depends on severity of disease, which is determined based on location and total body surface area involvement. Patients with mild to moderate disease often begin treatment with topical agents while patients with moderate to severe disease may need systemic therapy.



PLAY PICMONIC

Presentation

Epidermal Hyperproliferation Keratinocytes

Carrot-tin

In psoriasis, the keratinocytes in the epidermis undergo excessive proliferation. This causes the epidermis to thicken in a process called acanthosis.

Defined Red Salmon Plaques

Red Salmon Plaques with Plaques

Psoriasis usually presents as well demarcated plaques described as having a salmon color. A plaque is a general dermatology term for an area of skin elevation > 1 cm in diameter.

Silvery Scales

Silvery Scales

Classically, silver colored scales overlie the psoriatic plaques. The silver scale is caused by hyperkeratosis or excessive keratin in the stratum corneum.

Extensor Surfaces

Extensor surfaces

Psoriasis tends to favor the extensor surfaces including the knees and elbows. It also often occurs on the scalp.

Bleeding when Removed

Blood

If the psoriatic plaque is scratched or removed, patients display pinpoint bleeding at the site. This is a phenomenon known as Auspitz sign.

Auspitz Sign

Owl-spits

Auspitz Sign refers to pinpoint bleeding from exposed dermal papillae (which are rich in blood vessels) when psoriatic scales are picked off.

Pruritus

Prairie-dog

Patients experience itching, which can range from mild to severe.

Nail Changes

Nails

Patients with psoriasis may experience nail changes including pitted nails, which are pinhead-sized depressions in the nail bed. Additionally, patients can experience changes in the nail color as well as separation of the nail from the nail bed.

Histological Finding

Munro Microabscesses

Marilyn-Munro Abscesses

Histologically, there are collections of neutrophils in the stratum corneum of the epidermis, termed Munro microabscesses.

Nucleated Cells in Stratum Corneum

Nucleated Corn-field

Histological findings of psoriasis include parakeratosis, which is retained keratinocyte nuclei in the thickened stratum corneum. Recall, the stratum corneum is the most superficial layer in the epidermis and is normally characterized by keratin in anucleate cells. It is also important to note that there is histologic absence of the stratum granulosum in psoriasis.

Treatment

Retinoids

Red-tin-droid

Systemic retinoids (derivatives of Vitamin A) are used in patients with moderate to severe psoriasis. Retinoids may be used in combination with UV light therapy.

Topical Corticosteroids

Topical Quarter-on-steroids

Patients with mild to moderate psoriasis typically respond well to topical treatments. Topical corticosteroids are the mainstay of topical psoriasis treatment and exert anti-inflammatory, anti-proliferative and immunosuppressive actions.

Tar

Tar

Tar is helpful as an adjunct to topical corticosteroids. Tar products are available in the form of shampoos, creams, lotions, ointments and oils.

Immunosuppressants

Moon-suppressed

Moderate to severe psoriasis often requires the usage of systemic therapies including immunosuppressive or immunomodulatory drugs such as methotrexate, cyclosporine or tacrolimus.