

# علمي او څېړنيزه مجله













گڼه: لومړی ټوک: څلورم

کال: ۱۴۰۴

## بسم الله الرحمن الرحيم





## بُست علمي او خبرنيزه مجله

بُست پوهنتون څلورم ټوک – لومړی ګڼه کال – ۱۴۰۴

### بُست علمي او څېړنيزه مجله بُست پوهنتون

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ډيزاين: د بُست پوهنتون د خپرنيزو او فرهنګی چارو مديريت د خيرولو کال: ۱۴۰۴

درک: بُست پوهنتون، لشکرگاه، هلمند، افغانستان

#### د بُست پوهنتون د رئيس پيغام

په نني ژوند کې د يوې علمي مؤسسې يو له مسؤليتونو څخه دا دى ، چې نه يواځې خپل محصلان د پوهې په گاڼه سمبال کړي، بلکې د پوهنتون د لوړو زده کړو لرونکو پوهانو او استادانو د علمي زيرمتون څخه داسي څه وخت په وخت راوباسي، چې د ټولني د ژوند د اړتياوو د پوره کولو لپاره او يا لږ تر لږه د ټولنې د لوستي قشر د خبرولو او که وکولای شي له هغوی څخه د عمل په ډگر کې د گټي اخيستنې په موخه ، په کار واچول شي.

و دې موخې ته د رسیدلو لپاره پوهنتون باید یو داسې علمي خپرندویه ارگان ولري، چې په هغه کې د پوهنتون ټول با صلاحیته منسوبین که هغه استاد وي، که کارکوونکی او که زده کړه یال ، خپلې علمي او څیړنیزي مقالې او لیکنې د کاغذ پر مخ باندې کښیښودلای شي.

زما په شخصي آند پدې مجله کې لکه له نوم څخه چې يې ښکاري، بايد داسي مسائل را برسيره شي، چې نه يواځې په پوهنتون پورې راگير پاتې شي، بلکې په عام ډول سره د افغانې ټولنې او په ځانکړي ډول سره د هلمند ولايت د اوسيدونکو و نني او سبا ژوند ته په کتلو سره، برياليتونونه، ستونزي ، وړانديزونه او د حل لارې-چارې ، وړاندې کړل شي. هغه وخت به د بُست پوهنتون علمي مجله يواځې د بست پوهنتون نه، بلکې د ټول هلمند ولايت ، آن د سيمي او ټول افغانستان په کچه د پوهې او څيړنې په برخه کې د وخت د غوښتنو سره سم ، د پاملرنې وړ او و ځوان نسل ته د يوې سمې لارې د ښودلو په موخه ، يوه محبوبه او پر زياتو خلکو باندې گرانه مجله وي او په ټول هيواد کې به خپل مينه وال ولري.

دا مجله به د بُست پوهنتون د مشرتابه، استادانو ، محصلانو ، فارغانو او ټولو مینه د علمي او څیړنیزو مقالو د خپرولو لپاره که هغوی د پوهې په هر ډگر کې چې وي، یو خپرنیز ارگان وي،چې و خپریدلو ته به یې ټول مینه وال په تمه ناست وي.څومره به پرځای او ښه خبر وي، چې د ټولنې لوستی قشر په تیره بیا د بست پوهنتون محترم استادان ، فارغ شوي او بر حاله محصلان د علمي او څیړنیزو مقالو و لیکلو ته و هڅول شي.

زه د بُست پوهنتون د ټولو منسوبينو په استازيتوب وياړ لرم ، چې د بُست پوهنتون د علمې مجلې د خپريدلو له امله د محترم مؤسس، محترم علمي مرستيال او د څيړنې له محترم آمر او همدا رنگه د مجلې له ټولو کارکوونکو او پرسونل څخه د زيار او زحمت په گاللو سره چې مجله يې و خپريدلو ته چمتو کړې ده ، مننه او قدرداني وکړم، ټولو ته د زړه له کومې مبارکي وايم او هيله لرم چې د بُست پوهنتون د علمي مجلې کارکوونکي به خپل رسالت د پوهنتون او ټول هلمندې ولس او په اخرى تحليل کې د ټول افغان ملت پر وړاندې په پوره او ټينگ عزم سره سرته ورسوي.

په درنښت

ډيپلوم انجنير محمود سنگين

د بُست پوهنتون رئيس

#### سريزه

بُست پوهنتون وياړ لري چې د خپل علمي پرمختگ په لاره کې يي يو بل ډير مهم او اړين گام پورته کړ او هغه د بُست د علمي او څيړنيزي مجلې د څلورم ټوک، لومړی گڼې خپرېدل دي . تر هر څه دمخه د پوهنتون ټولو استادانو ، محصلانو او د علم او پوهې د لوی کور مينه والو ته د بُست د علمي او څيړنيزي مجلې د خپرېدلو مبارکي وړاندې کوم او ددې سره جوخت د ټولو ملگرو څخه چې ددې مجلې د جواز په تر لاسه کولو ، ترتيبولو او خپرولو کې يي نه ستړې کېدونکې ونډه اخيستې ده د زړه له کومي مننه کوم .

د علمي کور کهول او اړوند کسانو ته ښکاره ده او پوره باور لري چې د نننۍ نړۍ هر اړخيزه پر مختگ د پوهانو د علمي څيړنو د زيار له برکته ممکن سوی او د لوړو زده کړو مؤسسي، اکادميک انستيتوتونه او څيړنيز علمي مرکزونه پکښې مرکزي او پريکنده رول لوبولی دی.

همدې اصل او ارزښت ته په کتو سره بُست پوهنتون غواړي د پرمختللو اکاډميکو نورمونو په رعايت د تدريس، علميڅيړنو او نوښتونو له لاري مسلکي کادرونه وروزي او د معياري تحصيلي اسانتياوو او زمينو په برابرولو سره د ټولنې ځوانانو ته معياري او د لوړ کيفيت لوړې زده کړي وړاندی او د علميڅيړنو پر بنسټ د کړه پوهنيزو اثارو د توليد زمينه برابره کړي ، ترڅو د لوړو زده کړو او مسلکي پوهې په ډگر کې د گټوړو مهارتونو په تر لاسه کولو او د خپلو رښتينو اهدافو په لاسته راوړلو سره د ټولنې او هيواد په پرمختگ او رغونه کې رغنده ونډه واحلي او د رښتيني خدمت جوگه شي.

ژمن يو چي د هلمند ولايت، گاونډيو ولايتونو او په ټول هيواد کي ځوان نسل ته د اسلامي ، ملي او کلتوري ارزښتونو په رڼا کي معياري د علمي او مسلکي لوړو زده کړو او پراخو علمي څيړونو زمينه برابره او ټولني او هيواد ته ژمن او روزل سوي کادرونه وړاندي کړو.

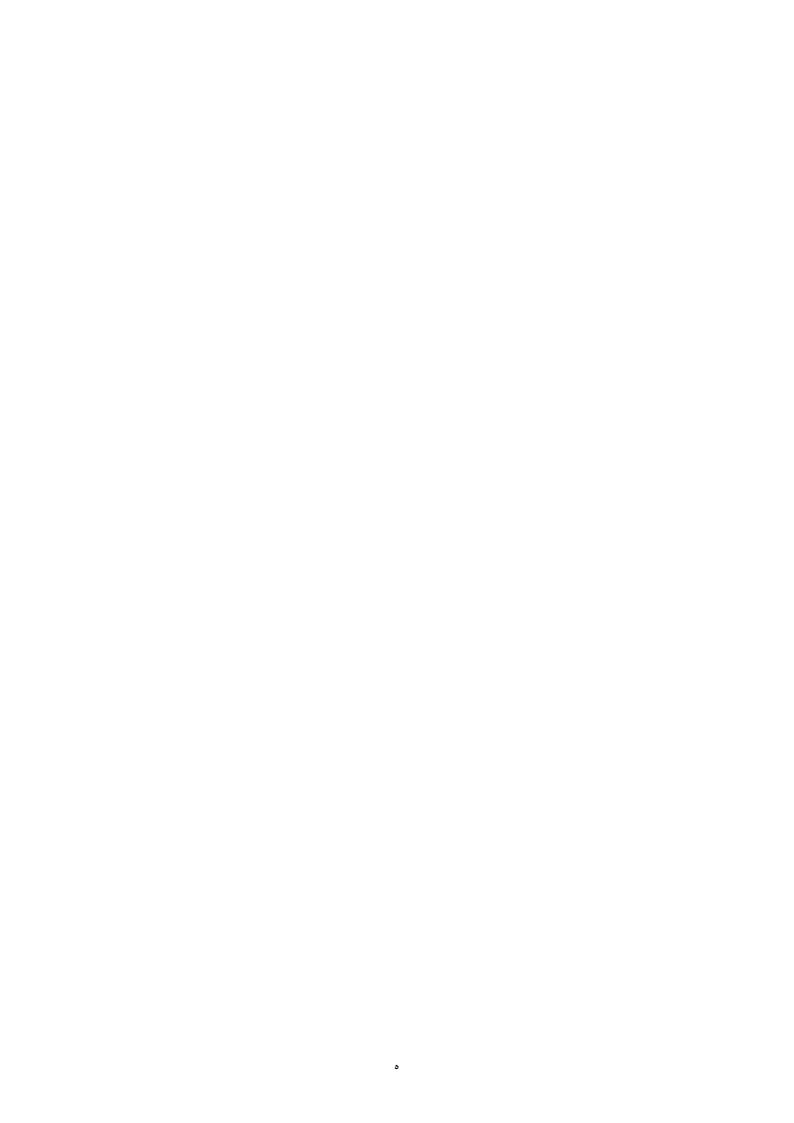
د اوس لپاره د بُست علمي او څيړنيزه مجله يوازي د **سائينسي علومو** په برخه کې علمي او څيړنيزي مقالي او ليکني د چاپ او نشر د تگلارې سره سم مني او خپروي او هيله مند يو چې په راتلونکې کي به نوري برخي هم ور زياتي کړل سي.

ډاډ لرم چې د بُست پوهنتون استادان، محصلان او علمي کارمندان به انشأالله، نن، سبا او په راتلونکې کې د خپلي علمي څيړنيزي مجلې د خپرولو له لاری خپل دغه دروند خو وياړلی دين (پور) ادأ کړي. همدا ډول ټولو د علم او پوهي څښتنانو او مينه والو ته په مينه سره بلنه ورکوو چي ددی علمي او څيړنيزي مجلي او د بُست پوهنتون د پرمختگ په لاره کي خپلي علمي او څيړنيزي ليکني، آندونه، وړانديزونه او رغنده نيوکي او مرستي د تل په شان راولوروۍ او د علم ددي ستر کور په ودانولو کي د خپلي ديني، او ملي برخي د ادايني وياړ راوبخښۍ.

موږ هوډ کړيدي او هيله مند يو چي انشآ الله د وخت په تيريدو سره به د خپل هيواد و بچيانو او ځوان نسل ته د تدريس ، ښه روزني او څيړنيز هاند لپاره اړيني او د پام وړاسانتياوي برابري کړو تر څو په لومړي پړاو کښي خپلو هلمندوالو بيا د سهيل لويديځي حوزي او په پاي کښي و ټولو هيوادوالو ته د يو داسي چو پړ مصدر وگرځي چي زموږ د ځوريدلي اولس او ويجاړشوي هيواد اقتصادي، فرهنگي، سياسي او ټولنيزي ستونزي حل او افغانستان د نړي د پرمختللوهيوادونو په ليکه کي ودريږي.

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## Psoriasis: A Comprehensive Overview of Its Etiology, Clinical Features, and Preventive Strategies

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#### **Abstract**

The review article titled "Psoriasis: A Comprehensive Overview of Its Etiology, Clinical Features, and Preventive Strategies," conducted in 2025, aims to introduce psoriasis while covering its epidemiology, pathophysiology, symptoms, clinical manifestations, types, and treatment options. Psoriasis is a prevalent, chronic inflammatory skin condition marked by distinct, red, scaly patches that usually appear on extensor surfaces such as the elbows and knees. Various clinical variants of psoriasis have been recognized, including palmoplantar, pustular, erythrodermic, and guttate psoriasis. While the diagnosis is mainly based on clinical evaluation, histological analysis may reveal hyperkeratosis, parakeratosis, epidermal acanthosis, dilated blood vessels, and lymphocytic infiltration. Psoriasis is regarded as an immune-mediated condition, and though its exact cause remains unclear, it is thought to emerge from a mix of genetic and environmental influences. Notably, psoriasis is linked to multiple systemic complications and comorbid conditions, which can considerably impact the quality of life for those affected by the disorder.

**Keywords:** Psoriasis, Diagnosis, Pathophysiology, Symptoms, Clinical Features, Types, and Treatment

ست علمي او څېړنيزه مجله څلورم ټوک - لومړي گڼه - کال۱۴۰۴

#### Introduction

Psoriasis is a long-lasting, inflammatory skin disorder marked by red patches covered with silvery scales, especially on the extensor surfaces, scalp, and lumbosacral area. This activity examines the underlying mechanisms, manifestations, and diagnosis of psoriasis, emphasizing the importance of a collaborative approach in its treatment (Nair & Badri, 2023).

According to the Mayo Clinic (2022), psoriasis is a dermatological condition that results in itchy, scaly rashes, predominantly found on the knees, elbows, trunk, and scalp. It is a frequent, chronic condition without a known cure. Psoriasis can be painful, disrupt sleep, and hinder concentration. The disease often goes through cycles, flaring for several weeks or months before easing off temporarily. Common triggers in individuals genetically predisposed to psoriasis include infections, cuts or burns, and specific medications.

Psoriasis is a widespread, chronic inflammatory skin disorder characterized by the development of sharply defined, scaly, red patches. It is a common condition in the United States and worldwide. According to the extensive population-based Multinational Assessment of Psoriasis and Psoriatic Arthritis (MAPP) survey, the prevalence of psoriasis ranges from 1.4% in Spain to 3.3% in Canada, with an overall prevalence of 1.9%. The prevalence in the United States is slightly above the average at 2.2%. Globally, prevalence can vary geographically and among different ethnicities within the same area, with higher rates generally reported in locations farther from the equator (Kimmel & Lebwohl, 2018).

Psoriasis can manifest at any age. However, the onset of the disease shows a bimodal distribution, peaking around ages 20–30 and again at 50–60 years old [Henseler & Christophers, 1985]. A family history of psoriasis is common. About 30% of individuals with the condition have a first-degree relative who also has psoriasis, and the likelihood of developing psoriasis increases with the number of affected family members. Some

research suggests that this bimodal distribution indicates two distinct types of psoriasis; patients presenting with psoriasis earlier in life are significantly more likely to have a genetic marker associated with the condition and to have a parent affected by it. Early-onset psoriasis is also correlated with more severe manifestations. Typically, the disease fluctuates over a patient's lifetime, and spontaneous remission without intervention is rare (Menter et al., 2008).

The plaques associated with psoriasis can be disfiguring, extremely itchy, and/or painful. Itching is frequently the most distressing symptom of the condition (Lebwohl et al., 2014). The quality of life can be significantly impacted, and many individuals with psoriasis report significant social and emotional distress along with adverse effects on their physical well-being (Krueger et al., 1998; Pariser et al., 2016). The functional impairment caused by psoriasis is comparable to or even exceeds that seen in other severe illnesses, such as cancer, depression, and heart disease (Rapp et al., 1999).

While most psoriasis patients have lighter skin, the condition can occur across all ethnicities. Research findings suggest psoriasis may be more prevalent in individuals with darker skin than previously recognized. In one study conducted in the U.S., researchers discovered that 3.6% of Caucasians, nearly 2% of African Americans, and 1.6% of Hispanics were affected by psoriasis (Psoriasis: Causes, 2014; Gottlieb & Korman, 2008).

#### **Epidemiology:**

Psoriasis is estimated to affect around 2–3% of the global population (Pariser et al., 2007). While the disease is more prevalent in polar regions, it is significant in tropical and subtropical countries like India. In this diverse nation, the prevalence of psoriasis can differ across regions due to various environmental and genetic influences. Only six studies conducted in North India, primarily in

hospital settings, have assessed the prevalence among adult dermatology patients (Okhandiar & Banerjee, 1963; Bedi, 1977; Dogra & Mahajan, 2016). The disease appears more common in males, with peak onset typically occurring in the third and fourth decades of life. A notable study in Northern India found the point prevalence of pediatric psoriasis to be 0.0002% (Dogra S, Kumar, 2003). Among boys, the highest incidence of onset is between ages 6 and 10, whereas for girls, it is between ages 11 and 15. A positive family history of psoriasis is noted in 9.8% to 28% of pediatric cases. Psoriatic arthritis typically develops between the ages of 35 and 50, with no gender bias. Approximately 70% of individuals develop psoriasis before experiencing joint issues; in 15% of cases, arthritis occurs before psoriasis by more than a year, and in the remaining 15%, both conditions manifest within 12 months of each other. The annual incidence and prevalence of psoriatic arthritis are estimated to be 3.0–23.1 cases per 100,000 people and 1-420 cases per 100,000 people, respectively (Prey et al., 2010), with comparable figures in Western countries and China. A systematic review indicated that psoriatic arthritis may impact up to 24% of individuals with psoriasis, although similar data for Indian patients is limited. In children, arthritis can precede the appearance of psoriasis in 50% of cases, with an average onset age of 9-10 years and a higher prevalence in females (Stoll et al., 2008).

#### **Pathophysiology of psoriasis:**

The pathophysiology of psoriasis is complex and involves multiple factors, including rapid epidermal growth, abnormal differentiation of epidermal keratinocytes, and inflammation linked immune changes in the skin. hyperproliferation is marked by increased DNA synthesis and a significantly reduced turnover rate for the epidermis. Abnormal differentiation of keratinocytes is characterized by elevated levels of certain keratins (6 and 16) and a delay in the expression of other keratins (1 and 10), which are typically found in skin that is differentiating

normally. Inflammation arises due to an influx of neutrophils within the epidermis and superficial dermis, along with an accumulation of T lymphocytes in the dermis, notably with a predominance of CD8+ cells (Price & Jackson, 2007).

#### **Causes of psoriasis:**

Psoriasis arises when skin cells are replaced at a rate faster than usual. The exact cause of this phenomenon remains unclear, but studies indicate it may be linked to an issue with the immune system. New skin cells are produced in the innermost layer of the skin, gradually moving up through the various layers until they reach the outermost surface, where they die and flake off. This entire process typically takes about 3 to 4 weeks. However, in individuals with psoriasis, this process occurs in just 3 to 7 days. Consequently, immature cells accumulate quickly on the skin's surface, resulting in flaky, crusty patches covered in scales (NHS, 2018).

As noted by the National Psoriasis Foundation (2021), the exact cause of psoriasis remains unclear. It is thought to be influenced by genetics, the immune system, and environmental factors. The plaques associated with psoriasis occur because an overactive immune system accelerates skin cell production. In healthy skin, cells grow and shed (fall off) over a month. In contrast, this cycle happens in three or four days with psoriasis. Instead of being shed, skin cells build up on the skin's surface. Psoriasis-related inflammation can affect other organs and tissues in the body, and those with psoriasis may experience additional health issues. Approximately one in three individuals with psoriasis may develop psoriatic arthritis. While the precise causes of psoriasis remain elusive, we understand that genetics and the immune system are key factors in its onset. One established thing is that psoriasis is not contagious, and you cannot transmit it from one person to another. Generally, specific triggers provoke psoriasis, leading to the onset or aggravation of symptoms. These triggers can differ among individuals.

#### **Symptoms of psoriasis:**

Dry, elevated patches on the skin are the most typical indication of psoriasis. These patches frequently have a silvery-white layer known as scales and are often itchy (American Academy of Dermatology Association, 2008). According to the National Institute of Arthritis and Musculoskeletal and Skin Diseases (2023), the symptoms of psoriasis differ among individuals. However, some common signs include thick, red skin patches with silvery-white scales that may itch or burn, typically found on the elbows, knees, scalp, trunk, palms, and soles of the feet. Additionally, there may be dry, cracked skin that itches or bleeds, along with thick, ridged, or pitted nails. Sleep quality can also be poor. Some individuals may experience a related condition called psoriatic arthritis, which is marked by joint stiffness, swelling, or pain; neck or back discomfort; or pain in the Achilles tendon. If you experience symptoms of psoriatic arthritis, it is essential to consult your doctor promptly, as untreated psoriatic arthritis can result in permanent damage. The symptoms of psoriasis may fluctuate over time, and you might notice periods when your symptoms worsen, referred to as flares, followed by intervals of improvement.

#### Clinical features of psoriasis:

Psoriasis presents as symmetrical, red, and scaly plaques with clearly defined borders. The scales are usually silvery-white, although the plaques often appear shiny in skin folds and have a moist, peeling surface. The most frequently affected areas include the scalp, elbows, and knees, although any part of the skin can be involved. Without treatment, these plaques tend to be quite persistent. While itching is generally mild, it can be severe for some scratching individuals, resulting in and lichenification. is which characterized thickened, leathery skin and pronounced skin markings. Painful cracks or fissures may develop, especially on the palms and soles. Psoriasis can exhibit the Koebner phenomenon, where new skin lesions arise in areas that have been traumatized or irritated, such as by injuries or burns. When psoriatic plaques resolve, they may leave behind brown or pale marks (postinflammatory hypo- or hyperpigmentation) that typically fade over several months. The Auspitz sign refers to pinpoint bleeding that occurs when the scaly layer is removed in plaque psoriasis, which is connected to the dilated dermal capillaries involved in the histological mechanisms of chronic psoriasis (Oakley, 2023).

#### **Types of psoriasis:**

According to the Cleveland Clinic (2022), there are several types of psoriasis, and they include:

1. Plaque psoriasis: Plaque psoriasis is the most prevalent form of the condition. Approximately 80% to 90% of individuals diagnosed with psoriasis experience plaque psoriasis (Figure 1). Psoriasis is a widespread, non-contagious skin disorder that can manifest in various forms. The variations of this condition include plaque, inverse (or skin fold), guttate, erythrodermic, and pustular psoriasis. Plaque psoriasis is a chronic skin disorder that affects around 2% to 3% of the global population. Lesions associated with plaque psoriasis are generally red and elevated, often featuring a scale layer. These may present as papules (small, elevated bumps), plaques (larger raised skin areas, bigger than a thumbnail), or a combination of both. Individuals with plaque psoriasis commonly have thick, white, scaly patches on their skin.



Figure 1. Plaque psoriasis (Source: Plaque Psoriasis Condition, Treatments and Pictures for Adults, 2022)

**2. Inverse psoriasis:** This type manifests in skin folds and forms thin plaques that lack scales. Inverse psoriasis, also called hidden psoriasis or intertriginous psoriasis, impacts areas of the skin that fold. These regions are where skin comes in contact with skin. Inverse psoriasis can develop in any area with creases, including the neck, buttocks, under the arms, beneath the breasts, or in the groin

and inner thigh regions. Individuals with inverse psoriasis often experience another form, such as plaque psoriasis, on different body parts. While raised patches of dry, scaly skin – a hallmark of plaque psoriasis – usually cover extensive areas, inverse psoriasis is more likely to appear in smaller spots. (Figure 2).

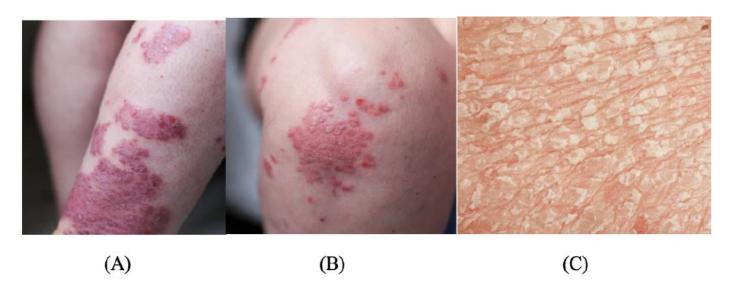


Figure 2. Inverse psoriasis (Source: Shutterstock, 2024)

**3. Guttate psoriasis:** Guttate psoriasis can develop following a sore throat due to a streptococcal infection. It appears as small, red, drop-shaped scaly lesions and frequently affects children and young adults. The primary indicators of guttate

psoriasis are tiny drop-shaped, scaly marks that emerge two to three weeks after a strep infection, typically linked to the throat or tonsils. In individuals with lighter skin, the lesions are usually pink or red, while in those with darker skin tones, بُست علمي او څېړنيزه مجله څلورم ټوک - لومړي گڼه - کال۱۴۰۴

the redness may be less visible or manifest as purple, grayish, or dark brown. The affected areas might be topped with thin, white, flaky skin. This rash typically begins on the torso, arms, and legs but can spread to larger regions, including the face, neck, and scalp. Itching is a common symptom linked to guttate psoriasis (Figure 3).



Figure 3. Guttate psoriasis (Source: Guttate Psoriasis in Adults: Causes, Symptoms, and Treatment, 2023)

4. Pustular psoriasis: Pustular psoriasis is characterized by small, pus-filled lesions on top of plaques. This uncommon and severe form can lead to numerous pustules (pus-filled bumps) on red, inflamed skin. People with pustular psoriasis frequently experience additional symptoms related to their skin condition, including a general feeling of discomfort, fever, itching, or pain in the skin. Pustular psoriasis can manifest as a one-time episode or a chronic condition persisting for many years. Although the precise cause of pustular psoriasis is poorly understood, it seems to stem

from an overactive immune response targeting the skin. This variant of psoriasis may develop in those who have experienced plaque psoriasis or those without any prior history. It can also be familial, as several genetic factors associated with pustular psoriasis have been identified. Flares of pustular psoriasis can be triggered by infections, discontinuing topical steroids or other treatments, low pregnancy, calcium levels. certain and various skin irritants like medications, sunburns (Figure 4).



Figure 4. Pustular psoriasis (Source: DermNet, 2023)

**5. Erythrodermic psoriasis:** Erythrodermic psoriasis is a severe form of the condition that impacts a significant portion (over 90%) of the skin. It leads to widespread discoloration and shedding of the skin. This is a rare variant of psoriasis, affecting just over 2% of individuals. Plaque psoriasis is typically considered a reliable reference point for those with the condition. It

disrupts the skin's ability to regulate temperature and provide protection against infections. If the body struggles to maintain warmth, there is a risk of hypothermia. The primary symptom of erythrodermic psoriasis is a large rash that envelops the entire body. On lighter skin tones, the rash reveals a red appearance; on darker skin, it may appear purple or gray (Figure 5).



Figure 5. Erythrodermic psoriasis (Source: Watson, 2018)

**6. Sebopsoriasis:** This condition often manifests on the face and scalp as raised bumps and plaques accompanied by a greasy, yellow scale. Sebopsoriasis represents an overlap of two disorders: seborrheic dermatitis and psoriasis, where characteristics of both ailments are present simultaneously. One can view seborrheic dermatitis as a transitional state between seborrheic

dermatitis and psoriasis, exhibiting traits from each condition. The term frequently refers to a psoriasiform rash in a seborrheic pattern when the clinical signs do not permit a definitive diagnosis. Typically, it becomes more evident over time and with the patient's response to treatment, which condition they truly have (Figure 6).

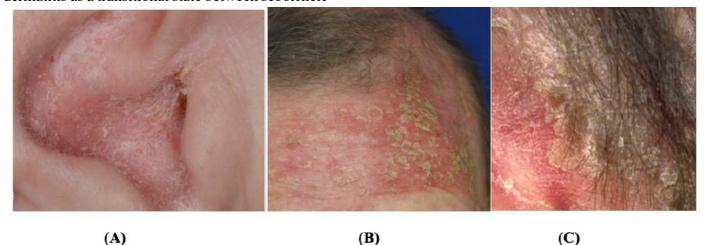


Figure 6. Sebopsoriasis (Source: Sebopsoriasis | DermNet, 2017)

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7. Nail psoriasis: Nail psoriasis leads to changes in color, pitting, and alterations in both fingernails and toenails. Many individuals with psoriasis experience irregularities in their nails. Psoriatic nails frequently exhibit a horizontal white or yellow border at the nail's tip, known as distal onycholysis, which occurs when the nail separates from the surrounding skin. Small indentations can often be found on the nail surface, and the nails are commonly yellow and brittle. Treatments for skin psoriasis can also be effective for nail psoriasis. However, due to the slow growth of nails, it may take some time to notice any improvements. Nail

psoriasis can be addressed through phototherapy, systemic treatments (medications that affect the entire body), and topical or injected steroids. If these treatments do not lead to better nail condition, a doctor might surgically remove the nail. Besides peeling, the weakening of the supportive structures of the nails can lead to crumbling. Fungal infections, such as onychomycosis, prevalent among individuals with psoriasis, can also cause nails to thicken. Furthermore, a chalky substance can accumulate beneath the nail, resulting in a condition known as subungual hyperkeratosis, which may cause pain or discomfort (Figure 7).

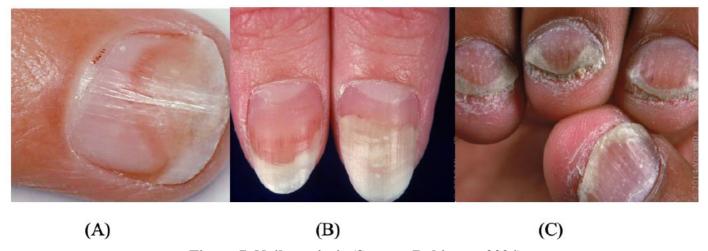


Figure 7. Nail psoriasis (Source: Robinson, 2024)

#### **Treatment of Psoriasis:**

Although there is no definitive cure for psoriasis at this time, various treatments are available to help control symptoms, enabling you to return to your daily activities and enjoy better sleep. There are several treatment options, and your physician will collaborate with you to determine the most suitable one based on the type of psoriasis, its severity, its location on your body, and the potential side effects associated with the medications. Your treatment plan may encompass the following (Garrick, 2017).

#### **Medications:**

**Topical therapies:** Creams, lotions, ointments, foams, or solutions, particularly those that include corticosteroids, are frequently utilized for the treatment of individuals with mild to moderate conditions. Additional topical treatments consist of vitamin D-based therapies, retinoids (which are

related to vitamin A), coal tar, anthralin (a different tar product), phosphodiesterase 4 (PDE4) inhibitors, and medications that activate the aryl hydrocarbon receptor (AhR).

**Methotrexate:** This medicine is an antimetabolite and can be taken orally or injected. It suppresses the immune system and slows down cell growth and division.

**Oral retinoids:** These compounds related to vitamin A may help some people with moderate to severe psoriasis. They can be used in combination with phototherapy.

**Biologic response modifiers:** These medications are injected and block specific immune molecules, helping to decrease or stop inflammation.

**Immunosuppressants:** These medicines are generally used for severe cases, and they work by suppressing the immune system.

#### Oral phosphodiesterase 4 (PDE4) inhibitors:

These target enzymes inside immune cells and suppress the rapid turnover of skin cells and inflammation.

Oral tyrosine kinase 2 (TYK2) inhibitors: These medications block the activation of certain immune cells.

According to NHS Choices (2022). Treatments fall into 3 categories that are detailed as follows:

- 1. Topical Treatment: Topical therapies are generally the initial treatments recommended for mild to moderate psoriasis. These consist of creams and ointments that you apply to the areas affected. Emollients are moisturizing products used directly on the skin to minimize water loss and create a protective barrier. If your psoriasis is mild, an emollient is likely the first option your doctor will recommend. The primary advantage of emollients is to hydrate the skin and alleviate itching and scaling. Some other topical treatments are believed to be more effective on skin that is moisturized. It's advisable to wait at least 30 minutes after applying an emollient before using any other topical treatment. Emollients come in a diverse range of products and can be acquired over the counter at a pharmacy or prescribed by your doctor, nurse, or health visitor. Some individuals discover that topical treatments alone are sufficient to manage their condition, although it may take up to six weeks to see a significant effect.
- **2. Phototherapy:** Phototherapy utilizes both natural and artificial light to manage psoriasis. Typically administered in hospitals and specialized centers, artificial light therapy is provided under the supervision of a dermatologist. It's important to note that these treatments differ from using a sunbed.
- **3. Systemic treatments:** If your psoriasis is severe or if other treatments have been ineffective, a specialist might recommend systemic therapies. These treatments operate throughout the whole body. These medications can successfully manage psoriasis, but they all come with the possibility of serious side effects. Every systemic treatment for

psoriasis carries its own advantages and risks. Prior to beginning treatment, discuss your options and any associated risks with your doctor. If you are planning to conceive, are pregnant, or considering breastfeeding, you should also consult your doctor before starting any new medication to ensure it is safe for use during pregnancy or while breastfeeding. There are two primary categories of systemic treatments: non-biological (generally administered as tablets or capsules) and biological (typically given via injections).

#### A. Non-biological medications

#### Methotrexate

Methotrexate can aid in managing psoriasis by decreasing the production of skin cells and reducing inflammation. It is generally taken once a week. Methotrexate may lead to nausea and can impact blood cell production. Prolonged use may result in liver damage. Individuals with liver disease should avoid taking methotrexate, and it's advisable not to consume alcohol while on this medication. Methotrexate can be extremely dangerous for a developing fetus, making it crucial for women to use contraception and avoid pregnancy during treatment and for at least six discontinuation. months after Men recommended to wait at least six months after their last methotrexate dose before attempting to conceive.

#### Ciclosporin

Ciclosporin is a medication that dampens the immune system (immunosuppressant). Initially, it was utilized to prevent the rejection of transplants, but it has also shown effectiveness in managing various forms of psoriasis. It is typically taken on a daily basis. Ciclosporin raises the risk of kidney disease and hypertension, which will require monitoring.

#### Acitretin

Acitretin is an oral retinoid that decreases the production of skin cells. It is utilized to treat severe psoriasis that has not improved with other non-biological systemic therapies. Typically, it is taken

once daily. Acitretin has a broad spectrum of side effects, which can include dryness and cracking of the lips, dryness in the nasal passages, and, in rare instances, hepatitis. This medication can be extremely dangerous to a developing fetus, so it is crucial for women to utilize contraception and avoid pregnancy while on this medication, as well as for at least three years following cessation. However, it is safe for a man who is on acitretin to conceive a child.

#### Other drugs

Apremilast and dimethyl fumarate are medications that help decrease inflammation. They are administered as daily tablets. These treatments are advised solely for individuals with severe psoriasis that hasn't improved with other non-biological therapies.

#### **B.** Biological treatments:

Biological therapies alleviate inflammation by focusing on hyperactive cells within the immune system. They are typically recommended for individuals with severe psoriasis that has not improved with alternative treatments or when other treatments are not suitable.

#### Etanercept

Etanercept is administered twice a week, and you'll receive instructions on how to do it. If you do not see any improvement in your psoriasis after 12 weeks, the treatment will be discontinued. The primary side effect of etanercept is a localized rash at the injection site. However, since etanercept impacts the entire immune system, there is a possibility of serious side effects, including severe infections. If you have a history of tuberculosis, there is a chance it may reactivate. You will be monitored for side effects throughout your treatment.

#### Adalimumab

Adalimumab is administered through an injection every two weeks, and you will receive guidance on how to do this. If you do not see any improvement in your psoriasis after a period of 16 weeks, the

treatment will be discontinued. The primary side effects associated with adalimumab consist of headaches, a rash at the site of injection, and feelings of nausea. Nevertheless, since adalimumab impacts the entire immune system, there is a potential risk of serious side effects, such as severe infections. You will be observed for any adverse effects throughout your treatment.

#### Infliximab

Infliximab is administered via an intravenous drip at the hospital. You will receive three infusions within the first six weeks, followed by one infusion every eight weeks thereafter. If there is no noticeable improvement in your psoriasis after ten weeks, the treatment will be discontinued. The most common side effect of infliximab is a headache. However, because infliximab impacts the entire immune system, there is a potential risk for serious side effects, such as severe infections. You will be closely monitored for side effects throughout your treatment.

#### Ustekinumab

Ustekinumab is administered at the start of treatment, followed by another dose four weeks later. After that, injections are scheduled every 12 weeks. If there is no noticeable improvement in your psoriasis after 16 weeks, the treatment will be discontinued. The primary side effects associated with ustekinumab include throat infections and a rash at the injection site. However, since ustekinumab impacts the entire immune system, there is a possibility of serious side effects, including severe infections. You will be monitored for side effects throughout your treatment.

#### Other biological treatments

A growing variety of biological therapies are administered via injections. Among these are guselkumab, brodalumab, secukinumab, ixekizumab, bimekizumab, and isankizumab. These are suggested for individuals with severe psoriasis who have not responded to other therapies or when alternative treatments are inappropriate.

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بُست علمي او څېړنيزه مجله کال ۱۴۰۴

#### سورايسس: د هغې د علت، کلينيکي ځانگړنو او وقايوي ستراتيژيو ته کتنه

پوهنیار ډاکټر ذبیح الله انوري ۱، پوهندوی ډاکټر علي احمد ۲۰ معالجوی څانگه، طب پوهنځی، بُست پوهنتون د مسوُل یمیل ادرس: aada.aliahmad@gmail.com

#### **Abstract**

دا کتابتوني څېړنه د سورایسس، د هغې د علت، کلینیکي ځانگړنو او وقایوي ستراتیژیو هر اړخیزه کتني تر عنوان لاندي په ۲۰۲۵ م کال کي ترسره سوې ده. ددې څېړني عمده موخي د سورایسس جلدي ناروغۍ د پېژندني ترځنگ د دې ناروغۍ د خپرېدو، فزیولوژیکي لاملونو، علایمو، کلینیکي نښو، ډولونو او درملني اړخونه تر پوښښ لاندي نیسي. سورایسس یوه ډېره عامه، مزمنه او التهابي پوټکي ناروغي ده، چي د پوستکي د روښانه، سور او پر پوټکي ولاړو پوړیو (سکیلونو) په شکل څرگندېږي او دا اکثره د بدن پر هغو برخو ښکاره کېږي، لکه څنگل او زنگونونه. د سورایسس بېلابېل کلینیکي ډولونه پېژندل سوي دي، چي پالموپلنټار، پوستولر، اریترودرمیک او گټېټ سورایسس شامل دي. که څه هم ډېری وخت تشخیص د کلینیکي معاینې له لاري ترسره کېږي، خو د پوستکي د نسجونو له تجزیې څخه ښایي ځانگړي نښي وموندل سي، لکه هایپرکراتوسس، پاراکیراتوسس، ایپیډرمال اکانتوسس، ویني رگونه او لیمفوسایتي ننوتنه. سورایسس یوه د معافیت د سیستم له خوا رامنځته کېدونکې ناروغي گڼل کېږي او که څه هم د دې کړه علت لا هم روښانه نه دی، خو داسي باور دی، چي دا ناروغي د جنیټیکي او محیطي فکتورونو د گډ تاثیر له امله منځته راځي. د یادوني وړ ده چي سورایسس له گڼو سیسټمیکي عوارضو او هم مهاله (comorbid) ناروغیو سره تړاو لري کوم، چې د ناروغانو د ژوندانه پر کیفیت باندي ژور اغېز کوي.

كليدي كليمې: سورايسس، تشخيص، فزيولوژي، علايم، كلينيكي ځانگړتياوي، ډولونه او درملنه.





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