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Exploring Psoriasis in the Modern Context: Pathogenic Insights, Clinical Profiles, and Herbal Dietary Solutions

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Abstract: The present review aimed to explore the various types of Psoriasis for quick updates on its etiology, pathophysiology, and treatment. Psoriasis is a common, chronic skin disease with a global prevalence of approximately 60 million people. It presents as chronic, symmetrical, erythematous scaling papules and plaques, and its impact extends beyond the skin, contributing to serious health issues such as depression, psoriatic arthritis, and cardiometabolic syndrome. Although primarily genetic, environmental factors, including infections, play a role in its manifestation. Reliable information on psoriasis has been collected from reputable sources. This condition necessitates holistic care, given its association with comorbidities and its significant impact on physical, emotional, and social well-being. Advances in understanding its pathophysiology have led to the development of highly effective and targeted treatments, offering hope for improved management and relief for those affected. The study summarizes psoriasis and its treatments that are very effective and targeted. Advances in the understanding of its pathophysiology have led to the development of highly effective and targeted treatments.

Keywords: Aetiology, Disease, Psoriasis, Treatment, Pathophysiology

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Introduction

Psoriasis is a condition that produces itchy, scaly areas of skin mostly on knees, elbows, trunk, and scalp. It is more frequent in those with psoriasis (Mrowietz, 2020). Chronic psoriasis is a prevalent and debilitating illness that has no known treatment. It may cause discomfort, disrupt sleep, and make it difficult to focus. A flare-up may only last a few days or weeks until a remission sets in. Infections, wounds, and burns, as well as certain drugs, are common causes of psoriasis in those who are genetically predisposed to it (Greb *et al*, 2016). Chronic and multifactorial, psoriasis is characterized by an increase in epidermal cell turnover and hyperproliferation of keratinocytes in the epidermis. There is evidence that environmental, genetic, as well as immunologic variables, are involved. There is a tendency for the illness to show up also on the skin of the elbow, knees, scalp, lumbosacral regions, intergluteal clefts and the penis. The joints might be impacted in up to 30% of individuals. Surface involvement, afflicted body sites, arthritis, plaque, and scale thickness all factor into treatment options (El Miedany, 2017). It is possible to have just one or two areas of plaque psoriasis, or it might affect the whole body. By a wide margin, this is the most prevalent symptom of the disorder (about 90% of people with psoriasis). Guttate psoriasis, as well as pustular (localized/generalized) psoriasis, are two more kinds of the disease. People suffering from psoriatic arthritis are more likely to have noticeable nail alterations than individuals without the condition (Kim *et al.*, 2017). Many persons with psoriasis suffer from substantial functional, psychological, as well as social morbidity, which hurts their job and earnings (Das *et al.*, 2019; Shaikh *et al.*, 2022). Skin-related symptoms (such as persistent itching, bleeding, scaling, and nail involvement), as well as treatment-related issues, psoriatic arthritis, and also the psychological toll of having a highly visible, so, as well as pustular (localized/generalized) psoriasis, disease, has a significant impact on the lives of even from those who have just modest participation (Das *et al.*, 2020). There

have also been reports of an expanded danger from cardiovascular disease, lymphoma as well as non-melanoma skin cancer in patients with psoriasis, especially those with severe illness (Coates and Ritchlin, 2011; Yang *et al.*, 2022).

For patients with some kind of psoriasis, examine the following (Tyutyunik and Kimmel, 2019):

- Intensity of illness
- Physical, psychological, and social well-being are all affected by sickness
- Regardless of their psoriatic arthritis status
- Any co-existing conditions.

History:

Hebrew Bible classified the ailment psoriasis as one of the many skin illnesses known as tzaraath (translated as leprosy) as a penalty for defamation. The kohen treats the individual because they were regarded as "impure" (see tumah and taharah) through their afflicted period. Since they employ the same Greek name for both ailments, it is more probable that this misconception originated because of this (Sarma, 2017). Scaly skin problems were known to the Greeks as lepra. Itchy skin problems were referred to as "psora" during the time. When English physicians Robert Willan with Thomas Bateman distinguished this from other skin illnesses in the 18th century, it became termed Willan's lepra (Luo *et al.*, 2019). It was said that psoriasis is distinct from leprosy because its patches are usually asymmetrical. There are two types of las leprosy, according to Willan: *graecorum leprosy* and *psora leprosa* (Muzumdar *et al.*, 2021).

Cornelius celsus is widely believed to have been the first person to describe psoriasis in ancient Rome. A probable relationship between psoriasis and arthritis symptoms was discovered by British dermatologist Thomas Bateman in 1813 (Gupta *et al.*, 2014).

In the history of psoriasis therapy, there are

several examples of medications with questionable efficacy and severe toxicity. Fowler's solution, which includes arsenic, was utilised by dermatologists in the late 18th century as a therapy for psoriasis (Ru *et al.*, 2019). During this period, mercury was also utilised to cure psoriasis. As psoriasis was wrongly considered to be an infectious condition at this time, sulphur, iodine, but also phenol were all regularly utilised therapies. In the early 1900s, coal tars and UV light irradiation were frequently employed as topical treatments (Yan *et al.*, 2020). Intravenous gold is used to treat psoriatic arthritis throughout the same period as rheumatoid arthritis (Farber, 1991).

Clinical Classification:

Psoriasis may present in many ways on the skin, but the most common is *Psoriasis vulgaris*, often known as plaque psoriasis. The scientific literature uses the words psoriasis as well as *Psoriasis vulgaris* interchangeably; nonetheless, there are substantial differences between the various clinical subtypes (Sarac *et al.*, 2016).

Psoriasis vulgaris:

Chronic plaque psoriasis accounts for about 90% of all psoriasis cases. There are distinct, erythematous, and itchy plaques coated in silvery scales that are the characteristic clinical symptoms. A huge region of skin may be covered by the plaques if they merge (Fig. 1A). The extensor regions of the limbs, the scalp, and the trunk are among the most Vulgarises (Eichhoff, 2021).

Inverse Psoriasis:

In the clinic, it manifests as discrete spots of erythema that are bright red Vulgarised in the intertriginous regions of the skin (Fig. 1B). The term "flexural psoriasis" is also used to refer to this disorder (Zanchi *et al.*, 2008).

Guttate psoriasis:

The onset of guttate psoriasis is marked by a sudden eruption of erythematous plaques that are very small. In children and adolescents, the most

frequent cause of tonsillitis is an infection caused by streptococcal bacteria (Fig. 1C). Guttate psoriasis is often accompanied by plaque psoriasis, which affects around one-third of patients (Ko *et al.*, 2010).

Pustular psoriasis:

Pustular psoriasis is characterised by numerous, coalescing sterile pustules. It is possible to have localised or widespread pustular psoriasis. *Psoriasis pustulosa palmoplantaris* (PPP), as well as *acrodermatitis continua* of Hallopeau, are two separate localised manifestations that have been identified. PPP is a condition that only affects the palms and soles of the feet, while ACS is even more distally placed at the tips of the fingers and toes but also affects the entire nail apparatus. However, both conditions may be found in the hands and feet (Fig. 1D). Psoriasis pustular generalise has a course that is acute and moves quickly, and it is defined by patches of diffuse redness as well as subcorneal pustules. It is often associated with symptoms that affect the body as a whole (Bernardo and Lebwohl, 2014).

Erythrodermic psoriasis:

An acute disorder known as erythrodermic psoriasis is characterised by erythematous and inflammatory lesions covering more than 90% of the entire body surface area (Fig.1E). Psoriasis of any form may give rise to erythroderma, which is a condition that needs immediate medical attention (Abdul Ahad *et al.*, 2022).

Pathophysiology particulars of psoriasis:

Symptoms:

The various frequent psoriasis symptoms and signs (Blauvelt and Strober, 2021) are as follow:

- A patchy skin disorder characterised by dandruff-like scaling and large-scale eruptions
- Psoriasis causes increased accumulation of skin surface epithelium, resulting in a scaly area of skin.
- Rashes of varying colours, ranging from pink and red with a silver scale on white skin to

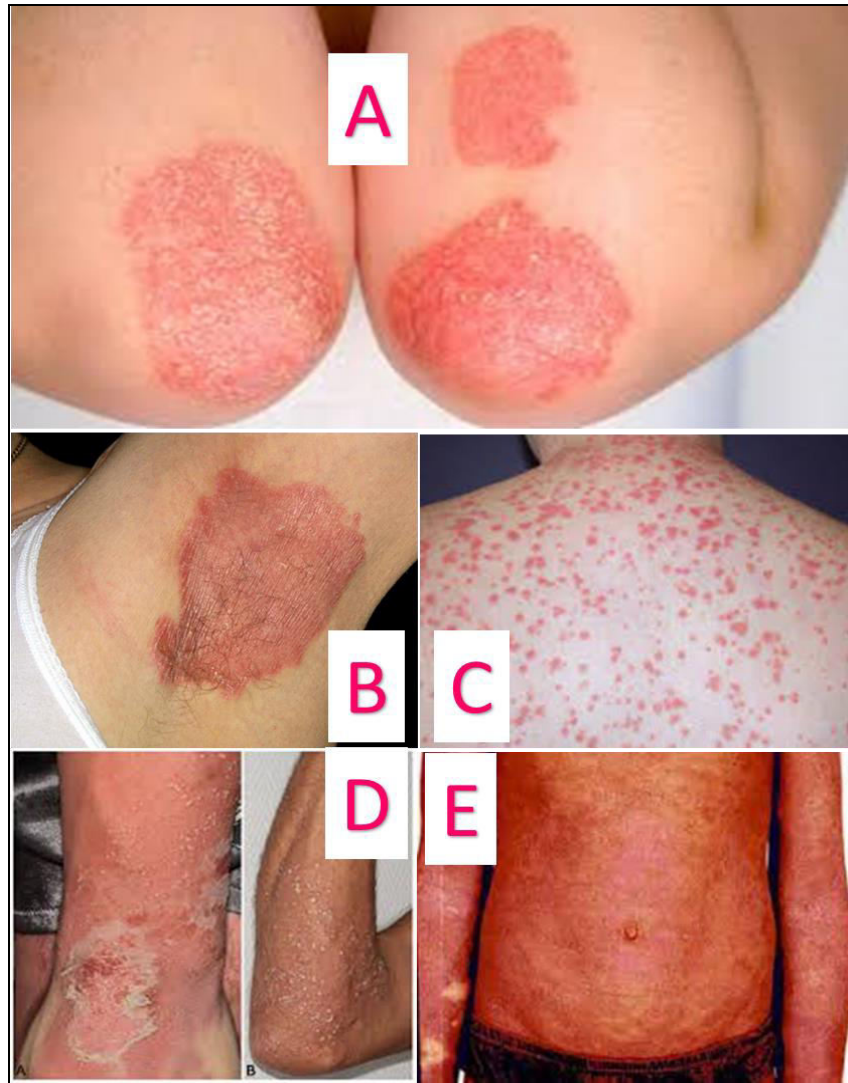


Fig.1: (A) skin with Psoriasis vulgaris; (B) Arm pit with Inverse Psoriasis; (C) Skin with Guttate Psoriasis; (D) Skin with Pustular psoriasis; (E) Skin with Erythrodermic psoriasis.

purple with greyscale on brown or black skin.

- Small scaly patches (commonly seen in children)
- The skin on the hands and feet can bleed if it cracks/dry.
- When persons with pale skin have psoriasis, they often develop splotches of silvery white scale. On dark skin, this disorder is more likely to manifest as purple or brown areas with grey scales.
- These symptoms may vary between periods of remission when they disappear, and periods of

flare-up, when they reappear. A patient will also be in remission from their condition for an estimated range from 1 to 12 months.

- The lengths of flares and remissions may be difficult to predict.
- Psoriasis may manifest in several ways, depending on the person and the kind of psoriasis.

Pathophysiology:

The epidermal layer of the skin grows abnormally quickly and excessively in psoriasis. Skin cell overproduction and abnormal cell production

(particularly during wound healing) are the outcomes of psoriasis' pathogenic processes. Skin damage, infection or medication use may trigger an immune system response that leads to psoriatic disease beginning and then chronic disease development in later stages. When someone has psoriasis, their skin cells are changed every 3-5 days instead of the typical 28-30 days. These alterations are thought to be caused because of an inflammatory cascade in the dermis comprising dendritic cells, macrophages, as well as T cells that cause premature maturation of keratinocytes (three subtypes of white blood cells). Interleukin (IL)-36, tumour necrosis factor-, IL-1, IL-6, and IL-22 are among the cytokines secreted by these immune cells when they migrate from the dermis to the epidermis. These inflammatory signals are thought to encourage the proliferation of keratinocytes. Psoriasis may be caused by a problem with the regulatory T cells and the regulating cytokine IL-10, according to one theory of the disease. As with psoriatic skin lesions, inflammatory cytokines have been detected in the nails and joints of people with psoriatic arthritis, indicating a shared inflammatory process (de Alcantara *et al.*, 2021).

Skin-functioning barrier protein gene mutations have been reported as psoriasis risk indicators by genetic testing. As an inflammatory trigger in psoriasis, DNA produced from dying cells activates dendritic cell receptors, which create the cytokine interferon.. Keratinocytes also release cytokines such as IL-1, IL-6, and tumour necrosis factor in response to these chemical signals from dendritic cells and T cells, signalling the arrival of downstream inflammatory cells and stimulating more inflammation (Rendon and Schäkel, 2019).

Cells of the dendritic type serve as a link between the body's innate and acquired immune systems. Psoriatic lesions have an elevated level of these molecules which promote the development of T cells as well as helper T cells of type 1 (Th1). PUVA and psoralen treatment may lower the number of dendritic cells and prefer a Th2 cell

cytokine profile beyond a Th1/Th17 cell cytokine profile. Psoriatic T cells migrate into the epidermis from the dermis and release interferon- and IL-17, respectively. IL-17 and IL-22 are induced by IL-23, according to previous research. Keratinocytes produce neutrophil-attracting cytokines in response to IL-22 and IL-17 (Armstrong and Read, 2020).

Etiology:

The prevalence of psoriasis ranges from 0.2-4.8%. An autoimmune disorder involving T-cell number is to be determined, although it is thought to be the cause. Many people with psoriasis have HLA antigens associated with them, especially in ethnic and racial groupings. The fact that it tends to run in families implies a genetic basis. Psoriasis lesions may be caused by mechanical, chemical, or radiation damage. Chloroquine, lithium, β -blockers, steroids, as well as NSAIDs may exacerbate psoriasis, as might many other medications. As a general rule, psoriasis improves in the summer and worsens in the winter. Additional psoriasis-inducing variables include stress, drinking, cigarettes, being overweight or having low levels of vitamin D in the blood (Ahad *et al.*, 2021).

Epidemiology:

About 3.2% of adults and 0.13% of children in the United States are affected with psoriasis, and also the incidence is roughly 80 unique cases per 100,000 person-years. Throughout 125 million individuals around the world are estimated to have psoriasis, and the prevalence of psoriasis varies greatly from place to region, varying from 0.5% in areas of Asia to that as much as 8% in Norway. Women and men remain equally impacted in the majority of locations. However, although the psoriatic disease may appear at any age, there is a bimodal year old between the ages of 18 and 39 years, as well as 50-69 years. The beginning of psoriasis may be influenced by genetic and environmental factors. Human leukocyte antigen (HLA)-C mutation has been linked to an earlier start of psoriasis, for instance

(Abdulwahhab *et al.*, 2021).

Treatment and management of psoriasis:

Assessment and treatment of patients with psoriasis:

Psoriasis severity is assessed by looking at how much erythema, induration, and scales there are on the skin. Aside from the Dermatology Life Quality Index (DLQI), patients' self-reported outcomes, including the Psoriasis Area Severity Index (PASI) and Physician Global Assessment Scale (PGAS), play an essential role in secondary care Dermatology Life Quality Index (DLQI). If this is the case, treatment adherence and interest may suffer. Co-morbidities might be discovered at every encounter with a patient. Treatment choices for psoriasis may be affected by the presence of many comorbidities. Patients with persistent liver illness, for example, should avoid using methotrexate. Patients who are suffering from rheumatological conditions benefit from multi-disciplinary care, which involves rheumatology specialists as well as specialists in gastro-enterological diseases.

Treatments such as phototherapy (NB-UVB) and traditional systemic medications (PUVA) are utilised as second-line treatments (methotrexate, ciclosporin and acitretin). PUVA has mostly been replaced with NB-UVB due to the obvious elevated risk of skin cancer that comes with continuous exposure to the substance.

Methotrexate inhibits dihydrofolate reductase inhibition, aminoimidazole carboxamide ribotide transformylase (AICARTase) inhibition, and adenosine buildup, among other things. Bone marrow suppression is the most significant side effect. In addition to nausea, pneumonitis, hepatitis, liver fibrosis, and teratogenicity, there are other possible side effects of therapy. Every week, patients typically take oral methotrexate. Because of its increased absorption and fewer adverse effects on the gastrointestinal tract, the subcutaneous formulation is more effective. But hypertension and permanent kidney damage are possible side effects of Ciclosporin, which is an

inhibitor of calcineurin. Keratinocyte differentiation is facilitated by the oral retinoid Acitretin. Some of the negative effects it may have included dry skin, hair loss, hyperlipidaemia, and liver damage. Pregnancy should be avoided while using methotrexate or acitretin. Biotherapeutics or oral small molecule inhibitors may also be investigated in cases where methotrexate and/or ciclosporin are ineffective or if second-line treatments are not appropriate.

Proinflammatory cytokines are the target of biologics, which are antibodies or soluble receptors with specific clonal sequences of amino acids. When it comes to moderate to severe illness, drugs have had a profound effect on outcomes. Multiple biologic therapies have been approved for use in moderate to severe psoriasis, including TNF, IL-12/23p40 (ustekinumab), IL-12/23p19 (rizankizumab, guselkumab and tildrakizumab), IL-17 (ixekizumab and secukinumab), IL-17 receptor (brodalumab) inhibitors, and IL-17 (ixekizumab and secukinumab). There is not a single "best" agent, and each patient's demands must be taken into account while making a biological treatment decision. Currently, clinical information such as psoriasis factors (disease phenotype and presence of PsA and results of previous biologic treatment) and comorbidities (demyelinating disease and inflammatory bowel disease) as well as drug-specific characteristics (dosing frequency) and lifestyle considerations are the primary influences (conception plans). A growing body of research is focusing on how genetic information may be used to help guide the future use of treatments.

Subcutaneous or intravenous delivery of biologics is necessary, notwithstanding their effectiveness. Phosphodiesterase 4 inhibitor and dimethyl fumarate are approved for moderate-severe psoriasis, while studies are continuing for small compounds inhibiting tyrosine kinase 2 in the Janus kinase (JAK)-signal transducer and accelerator of transcription proteins (STAT) pathway (Ahad *et al.*, 2021b; Haddad *et al.*, 2022).

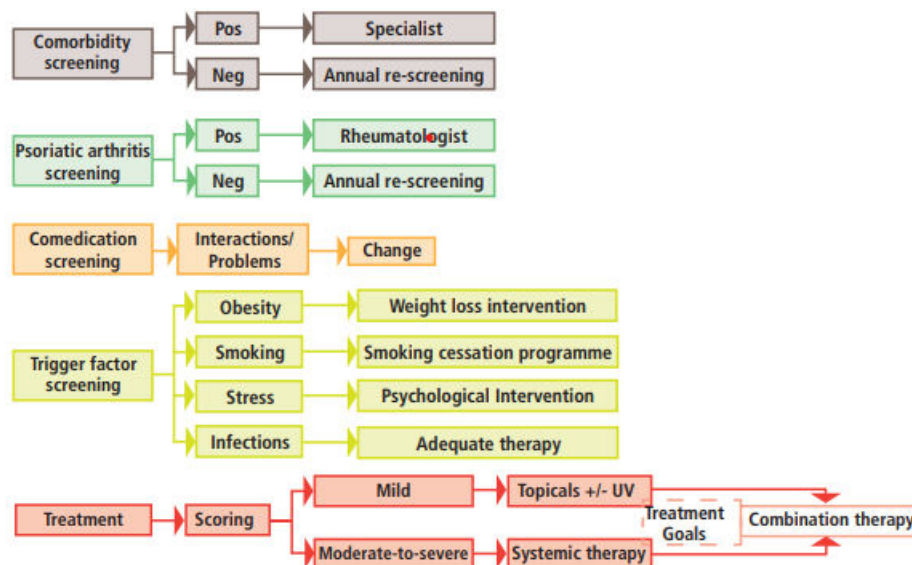


Fig. 2: Psoriasis management algorithm.

Principles of psoriasis management:

Chronic and incurable, psoriasis is by its very nature a disease that has unexpected symptoms and causes. All therapies must fulfil high-quality requirements that are both effective and safe over lengthy durations since the consequences are typically long-term therapy. Until the aetiology of psoriasis can be identified, there is no medication for moderate-severe symptoms. Phototherapy and a variety of topical and systemic therapies are among the treatment options. It also includes therapy for arthritis and other afflictions, such as rheumatoid arthritis. Psoriasis sufferers need more than just skin and joint care to be properly cared for. To effectively treat psoriasis, doctors must use a multidisciplinary high-quality address to the needs of the patient as a whole, rather than just providing medications. In addition to treating psoriasis itself, it is important to keep an eye out for consequences including hypertension, dyslipidemia, diabetes, and cardiovascular disease, all of which may lead to a heart attack or stroke. Those who have psoriasis seem to be more likely to be depressed or anxious, and they are also more prone to consider suicide. Preventing drug-drug interactions and drug-triggered psoriasis by routine screenings and co-medication

is an important element of psoriasis therapy, as is identifying trigger factors and treating them. Countries with well-developed social and healthcare systems may tailanagement algorithms to their unique healthcare contexts. Psychiatric treatment, patient education, and psychotherapy may all be necessary. Individual treatment, group therapy, nurse intervention, and telephone or telemedicine assistance may all be beneficial. As has been shown with other chronic skin disorders, patient empowerment is a key component of effective programmes (Lebwohl *et al.*, 2015).

Psoriasis management algorithm:

The algorithm for the management of psoriasis is shown in Figure 2 (Michalek *et al.*, 2017).

Quality of life and psychological aspects of psoriasis:

Patients' quality of life is significantly diminished, even if their chances of survival are not adversely affected by psoriasis. Despite this, most clinical studies for novel psoriasis therapies concentrate on "objective" physical parameters as the main effectiveness goal. Patients and doctors alike base their treatment decisions on the prospect of a better quality of life. Finlay's study has emphasised the negative impact on quality of life. Chronic disorders including ischemic heart

disease and type 2 diabetes have harsher effects on quality of life than psoriasis does. Many studies show that people with psoriasis are subjected to social stigmas as a result of their disease. More than 5% of patients suffer from sadness and suicidal thoughts as a result of this.

At least one-third of people with psoriasis suffer from pathological concern and anxiety, and these psychological interpersonal issues have a direct impact on the patient's everyday life. Psoriasis sufferers' avoidance behaviour and the feeling that they are being judged only based on their skin illness are the two most significant sources of stress in their lives. Anxiety at a low level may develop as a result of this avoidant, constrictive behaviour. However, there seems to be no connection between the degree or position of psoriasis and mental health issues. "Severity" of Psoriasis is a combination of both physical and psychological aspects, which is further underlined mostly by the Psoriasis Disability Index. Pathological concern, a sort of stress, impairs a patient's ability to respond to treatment. PUVA treatment shows that patients who have been classified as having high or pathological depression and stress resolve far more slowly, if at all than their low worrier peers. Psoriasis may benefit from psychological interventions, such as cognitive behaviour therapy and stress management. An important side effect of this treatment is a decrease in the clinical severity of the illness when it is administered in conjunction with standard pharmaceutical therapy. We do not know why or how stress contributes to the onset or progression of psoriasis. About 60% of patients say stress is a significant "exacerbator" or "trigger" of their illness. Rheumatoid arthritis is an example of a chronic autoimmune illness in which aberrant neuroendocrine signs of stress may influence the disease's aetiology (RA). An aberrant hypothalamic-adrenal reaction to acute stress is probably present in certain psoriasis patients. This is an area that warrants more exploration.

Furthermore, the evaluation of therapy also considers its impact on the patient's quality of life

metrics. Quality-of-life statistics are crucial in measuring the intangible changes in a patient's life that signify "treatment success." In the case of chronic, non-life-threatening conditions like psoriasis, effective therapy should improve the patient's quality of life to be considered clinically relevant. The Salford Psoriasis Index (SPI) has been developed to provide a comprehensive assessment of overall disease severity, including a physical severity index (PASI) which assesses the physical severity on a scale of 0-10. This approach acknowledges the significance of addressing not only the physical symptoms but also the broader quality of life factors in managing chronic conditions.

Psychosocial disability:

A visual analogue scale ranging from 0 to 10 is employed to assess the severity of the condition. Doctors utilize quality of life data to evaluate the efficacy of therapies for chronic diseases like rheumatoid arthritis (RA) and inflammatory bowel disease (IBD). For IBD, the widely utilized Inflammatory Bowel Disease Questionnaire (IBDQ) is substantially correlated with the Crohn's Disease Activity Index (CDAI). The CDAI also incorporates a quality-of-life measure known as the patient's feeling of well-being. In the context of RA, quality of life is a significant factor and is used to measure impairment according to the American College of Rheumatology's (ACR) improvement criteria. Quality of life indicators have been observed to contribute to increased ACR response rates, often surpassing objective measurements of physical function or disability.

Quality-of-life instruments for psoriasis has been created and used in clinical studies to determine the number of patients achieving a 75% decrease in the Psoriasis Area and Severity Index (PASI) compared to placebo.

It is possible to compare disease burdens using general health measures, such as SF 36, but these instruments are not excellent at taking into account outcomes in cost-effectiveness analyses. This has been addressed by a device dubbed

"utilities," which has recently been tested on skin ailments. To make comparisons across illnesses and populations, utility measurements are made consistently. Patients are asked to declare their readiness to accept a shorter lifespan in return for a lifetime free of sickness and to specify the percentage decrease they are ready to tolerate. Patients being monitored for psoriasis, for example, have shown a readiness to give up 2.8 of their potential 35 years of life expectancy in exchange for being free of the illness. A patient suffering from metastatic prostate cancer is prepared to give up 4.2 years of their life for the chance to be disease-free, according to an extrapolation (Richards *et al.*, 2001).

Medicines for psoriasis:

Many skin conditions, like psoriasis, have costly, long-term therapies that are not covered by health insurance plans that cover everyone. Patients with psoriasis, many of whom are unable to work due to their illness or because of prejudice, frequently have to foot the bill for their treatment, which may be financially devastating. 100,000 individuals are forced into poverty every year because they must pay for their health care, according to WHO Global Health Expenditure Atlas. Unfortunately, even those medicines on the WHO's Model List of Essential Medicines are either unavailable or unreimbursed in many countries. Prices for drugs to treat psoriasis vary greatly from low-cost topical corticosteroids to high-priced biotechnological treatments. Biologic drugs have greatly enlarged the therapeutic choices available to psoriasis patients, but the cost of these newer therapies is far more than the cost of older systemic medicines and phototherapy. Between 2000 and 2008, a cost study of systemic treatments found that medicine costs rose faster than the overall rate of inflation. Due to the long-term nature of psoriasis, these costs will continue to rise over time. There is little doubt that the high expense of treatments for chronic illnesses such as psoriasis adds a significant burden to total healthcare costs, regardless of who bears the cost. Especially about newer systemic medicines,

manufacturers must engage with buyers and authorities to cut pricing. Psoriasis therapy in low-resource areas might be hampered by the price of generic topical medicines and less expensive systemic medications like methotrexate and cyclosporine.

Dietary herbs to cure psoriasis:

Baphicacanthus cusia (Indigo naturalis):

It is a plant traditionally used in Chinese medicine to produce indigo-colored dye, has shown promise in treating skin and nail psoriasis. An oil extract derived from this plant has been utilized for its potential therapeutic effects in managing psoriasis affecting the skin and nails. This suggests that traditional remedies from Chinese medicine may offer alternative approaches for addressing psoriasis symptoms.

Aloe barbadensis miller (Aloe vera):

It is commonly known as *Aloe vera*, is renowned for its soothing and cooling properties. These qualities promote the renewal of skin cells and offer relief to sensitive skin. In the case of a mild psoriasis flare-up, applying an *Aloe vera*-based cream topically three times a day for five days can help reduce inflammation and provide relief. This natural remedy's popularity is attributed to its ability to calm and comfort the skin.

Curcuma longa (Turmeric):

Curcumin, a compound found in abundance in turmeric, is well-known for its potent anti-inflammatory and antibacterial properties. In the context of psoriasis management, a turmeric gel, combined with a mild amount of topical steroids, is applied to the affected area. In a clinical trial focused on psoriasis, this gel containing curcumin was found to lead to a significant improvement in psoriasis symptoms. This suggests that curcumin, when used in conjunction with other treatments, may offer promising benefits in alleviating the symptoms of psoriasis.

Capsicum species (Mirchi and pepper):

Capsaicin, the active component found in chili

peppers, is known for its ability to induce a burning sensation and may have potential benefits in managing psoriasis flare-ups. In a clinical trial, topical capsaicin was applied for six weeks to treat moderate and severe psoriasis. Interestingly, the intense burning sensation experienced at the application site can be alleviated when capsaicin is used in the form of a cream. This suggests a possible role for capsaicin in the management of psoriasis symptoms.

When considering herbal medicines, exercising caution is paramount as interactions can occur with conventional drugs or other plant-derived products. For example, topical applications may enhance the absorption of active ingredients in corticosteroids, and allergies should be closely monitored. Before applying a new topical treatment for psoriasis, it is essential to conduct a patch test on unaffected skin to check for any adverse reactions. If redness, hives, or itching arises, discontinuing the treatment is advised. Additionally, these products are not suitable for open wounds, and the use of herbal medications should be undertaken only under the guidance and prescription of a medical professional.

Conclusion

In conclusion, psoriasis is a prevalent inflammatory skin disorder with a primarily genetic basis and is linked to significant medical and psychosocial comorbidities, profoundly affecting patients' well-being. Various assessment methods exist to evaluate the quality of life of individuals with psoriasis and psoriatic arthritis, but a single comprehensive definition of quality of life is elusive. Further research is needed to identify the aspects of quality of life that are both sensitive and predictive of clinically significant changes in these patients. Fortunately, ongoing advancements in our understanding of the disease's biology have led to a growing array of treatment options that offer hope for enhancing the quality of life for psoriasis sufferers. While the exact cause of psoriasis remains uncertain, recent developments in psoriasis treatments have

provided means to reduce the frequency and severity of flare-ups, even though a definitive cure remains elusive.

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