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A RECENT REVIEW OF PSORIASIS

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ABSTRACT

Psoriasis is a common disorder characterized by marked increases in keratinocyte proliferation, abnormal patterns of keratinocyte differentiation, prominent alterations in dermal capillary vasculature and the presence of dermal and epidermal T cells, monocytes/macrophages and neutrophils. Psoriasis is one of the prevalent skin conditions. This chronic condition has a significant negative impact on patients' quality of life. Psoriasis has been linked to the depression and suicidal tendencies in the patients. Our objective of this study is to increase awareness among the people and to help them understand more precisely about this great enemy of mankind.

KEYWORDS: keratinocyte proliferation, abnormal patterns of keratinocyte differentiation, prominent alterations.

INTRODUCTION

Psoriasis is a common, genetically determined, inflammatory and proliferative disease of the skin, the most characteristic lesions consisting of chronic, sharply demarcated, dull-red scaly plaques, particularly on extensor parts of limbs and in the scalp.[1] The dry flakes and skin scales are thought to result from the rapid proliferation of skin cells that is triggered by abnormal lymphocytes from the blood. Psoriasis commonly affects the skin of the elbows, knees, and scalp. Psoriasis is considered a non-curable, long-term (chronic) skin condition. It has a variable course, periodically improving and worsening. It is not unusual for psoriasis to spontaneously clear for years and stay in remission. Many people note a worsening of their symptoms in the colder winter months. Psoriasis is seen worldwide, in all races, and both sexes.

Other symptoms may include

- Genital sores in males
- Joint pain or aching
- Nail changes, including thick nails, yellow-brown nails, dents in the nail, and nail lifts off from the skin underneath
- Severe dandruff on the scalp.[2]

TYPES OF PSORIASIS

Plaque psoriasis is the most common type of psoriasis. Approximately, nine out of 10 people with psoriasis have plaque psoriasis.

The following are less common types of psoriasis

Guttate psoriasis	: Appears as small, salmon-pink (or red) drops on the skin.
Pustular psoriasis	: Appears as raised bumps that are filled with pus.
Inverse psoriasis	: Appears as bright red, smooth patches in skin folds.
Erythrodermic psoriasis	: Bright red, itchy, peeling inflamed rash that covers most of the body.[5]

AGE OF ONSET

Although psoriasis can be seen in people of any age, from babies to seniors, most commonly patients are first diagnosed in their early adult years. Psoriasis often appears between the ages of 15 and 25, but can develop at any age. Psoriatic arthritis usually develops between the ages of 30 and 50, but can develop at any age.[4]

EPIDEMOLOGY

Psoriasis affects approximately 2% of the world's population, with men and women being equally affected.[3] There is a growing number of population-based studies providing worldwide prevalence estimates of psoriasis. Prevalence of psoriasis varies in different parts of the world. According to published reports, prevalence in different populations varies from 0% to 11.8%. For most of the data given, the range extends from around 0.5% to close to 2.5%. In the USA, the prevalence of psoriasis was estimated to be around 4.6% while in Canada it was 4.7%. Data from Europe show little variation in countries with a range from 1.4% (Norway), 1.55% (Croatia) and 1.6% (UK). In East Africa, the figure was 0.7% and in the Henan district of China only 0.7% were found affected. Prevalence studies from India found that the incidence of psoriasis among total skin patients ranged between 0.44 and 2.2%, with overall incidence of 1.02%. They noted that the incidence in Amritsar (2.2%) was higher as compared to other centers in Eastern India and speculated that it may be related to

different environmental conditions (extremes of temperature), dietary habits, and genetic differences. The ratio of male to female (2.46:1) was very high which could not be clearly accounted for. Highest incidence was noted in the age group of 20-39 years and the mean age of onset in males and females was comparable.[6]

RISK FACTORS

Psoriasis may be worse in people who have a weak immune system. This may be due to:

- AIDS
- Autoimmune disorders (such as rheumatoid arthritis)
- Cancer chemotherapy
- Bacteria or viral infections, including strep throat and upper respiratory infections
- Dry air or dry skin
- Injury to the skin, including cuts, burns, and insect bites
- Some medicines, including antimalarial drugs, beta-blockers, and lithium
- Stress
- Too little sunlight
- Too much sunlight (sunburn)
- Too much alcohol.[7]

ETIOPATHOLOGY

Psoriasis has no known cause. The tendency toward developing psoriasis is inherited in genes. Psoriasis is controllable with medication. Psoriasis is currently not curable.[2] Smoking, alcohol consumption, diet, psychological stress, infections and physical trauma have been suggested as factors which may influence the onset of the disease and/or may affect severity or response to treatment. The pathogenesis of psoriasis is still incompletely understood. A genetically determined skin disorder as a cause of the infiltration of lesions with activated T cells, interaction between dermal antigen-presenting cells, and activation of neutrophils and T cells has been postulated. Despite research over the past 30 years looking at many triggers, the "master switch" that turns on psoriasis is still a mystery.[1]

TREATMENT

The goal of treatment is to control your symptoms and prevent infection.

Three treatment options are available:

- Skin lotions, ointments, creams, and shampoos. These are called topical treatments.

- Pills or injections that affect the body's immune response, not just the skin. There are called systemic, or body-wide, treatments.
- Phototherapy, which uses light to treat psoriasis.[8]

Treatments used on the skin (topical)

Most of the time, psoriasis is treated with medications that are placed directly on the skin or scalp. This may include:

- Cortisone creams and ointments
- Creams or ointments that contain coal tar or anthralin
- Creams to remove the scaling (usually salicylic acid or lactic acid)
- Dandruff shampoos (over-the-counter or prescription)
- Moisturizers
- Prescription medicines containing vitamin D or vitamin A (retinoids).[9]

Topical and Combination Therapy: Topical therapy has seen key advances in recent years, particularly given the emergence of combination therapy as a highly efficacious approach to psoriasis. For example, calcipotriene 0.005% + betamethasone diproprionate 0.064% (Taclonex, LEO Pharma) ointment and topical suspension (Taclonex Scalp) combine the potency of a class II topical steroid with a vitamin D derivative that provides over a 70 percent improvement in psoriasis within four weeks. For patients with intense flaring, cyclosporine 5mg/ kg is often required to control the flare. Once improved (usually within six weeks), the addition of a biologic agent with tapering of cyclosporine over six weeks will minimize nephrotoxicity associated with cyclosporine.[10]

Systemic (body-wide) treatments

If you have very severe psoriasis, your doctor will likely recommend medicines that suppress the immune system's faulty response. These medicines include methotrexate or cyclosporine. Retinoids such as acitretin can also be used. Newer drugs called biologics are used when other treatments do not work.

Biologics approved for the treatment of psoriasis include.

- Adalimumab (Humira)
- Alefacept (Amevive)
- Etanercept (Enbrel)

- Infliximab (Remicade)
- Stelara

An approach to minimize the toxicity of some of these medicines has been commonly called "rotational" therapy. The idea is to change the anti-psoriasis drug every six to 24 months in order to minimize the possible side effects from any one type of therapy or medication.[12]

Phototherapy

Some people may choose to have phototherapy. Phototherapy is a medical treatment in which your skin is carefully exposed to ultraviolet light. Phototherapy may be given alone or after you take a drug that makes the skin sensitive to light. Phototherapy for psoriasis can be given as ultraviolet A (UVA) or ultraviolet B (UVB) light. Phototherapy, alone or in combination with coal tar or psoralen, is very effective in the treatment of moderate to severe psoriasis, but can lead to erythema and pruritus acutely, and long-term problems such as wrinkling, solar elastosis, and an increased risk of skin cancer.[15]

Other treatments

- If you have an infection, your doctor will prescribe antibiotics.
- Sometimes, a skin biopsy is done to rule out other possible conditions.[11]

At home care

Follow these tips at home

- Taking a daily bath or shower can help your psoriasis. Try not to scrub too hard because this can irritate the skin and trigger an attack.
- Oatmeal baths may be soothing and may help to loosen scales. You can use over-the-counter oatmeal bath products. Or, you can mix 1 cup of oatmeal into a tub of warm water.
- Keeping your skin clean and moist and avoiding your specific psoriasis triggers may help reduce the number of flare-ups.
- Sunlight may help your symptoms go away. Be careful not to get sunburned.
- Relaxation and anti-stress techniques may be helpful. The link between stress and flares of psoriasis is not well understood, however.[12, 13,14]

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