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**Anti-Gliadin antibody level in psoriatic patients in
comparison with healthy subjects**

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LIST

<i>Title</i>	<i>Page</i>
<i>English Abstract</i>	4
<i>Introduction</i>	5
<i>Review of Literatures</i>	7
<i>Methods and Materials</i>	27
<i>Results</i>	31
<i>Discussion</i>	37
<i>References</i>	42
<i>Persian Abstract</i>	47

Anti-Gliadin antibody level in psoriatic patients in comparison with healthy subjects

PURPOSE: To determine the anti-Gliadin antibody level in psoriatic patients in comparison with healthy subjects.

METHODS: All of 63 subjects with psoriasis who attended to Booali Hospital were conducted. Age, sex, duration of disease, smoking, concomitant involvement of gastrointestinal and musculoskeletal system, and anti-Gliadin antibody (Ig-G) level were evaluated in all patients and healthy subjects.

RESULTS: Mean age of the patients was 29.49 ± 10.77 years. 36 patients (57.1%) were male and 27 subjects (42.9%) were female. Mean duration of disease was 5.46 ± 2.87 years. Anti-Gliadin antibody level was normal in all patients and healthy subjects.

CONCLUSIONS: It may be concluded that Anti-Gliadin antibody level is not related to psoriasis. Hence, dietary regimen is not recommended to reduce disease severity.

Keywords: Anti-Gliadin, Antibody, Psoriasis

INTRODUCTION

Introduction

Psoriasis is a noncontagious skin disorder that most commonly appears as inflamed, edematous skin lesions covered with a silvery white scale. The most common type of psoriasis is plaque psoriasis. Flares may be related to systemic or environmental factors, including life stress events and infections. However some authors have declaimed about the role of foods and nutrition in being symptom-free in psoriatic patients and a probable Celiac disease-like pathgenicity has suggested. But this theory has not been well evaluated. Accordingly, this study was conducted to determine the anti-Gliadin antibody level in psoriatic patients in comparison with healthy subjects.

REVIEW OF
LITERATURES

Review of Literatures

Pathophysiology

The skin is the primary organ affected, but joints also are affected in 10% of cases.

Frequency

United States

Between 2 and 2.6% of the US population is affected. Between 150,000 and 260,000 new cases of psoriasis occur annually.

International

Incidence of psoriasis is dependent on the climate and genetic heritage of the population. It is less common in the tropics and in dark-skinned persons.

Mortality/Morbidity

- Four hundred people die annually from psoriasis-related causes in the US.

- Approximately 1.5 million people with psoriatic arthritis seek medical care each year in the US.

Race

Psoriasis is more common in whites.

Sex

Psoriasis is slightly more common in women.

Age

Approximately 10-15% of new cases begin in children younger than 10 years. The median age at onset is 28 years.

CLINICAL

History

- 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
- Family history of similar rash
- Pain
- Pruritus
- No fever
- Vesicles
- Long-term rash with recent presentation of joint pain

Physical

Findings on physical examination depend on the type of psoriasis.

- Plaque psoriasis is characterized by raised inflamed lesions covered with a silvery white scale. The scale may be scraped away to reveal inflamed skin beneath. This is most common on the extensor surfaces of the knees, elbows, scalp, and trunk.
- Guttate psoriasis presents as small red dots of psoriasis that usually appear on the trunk, arms, and legs; the lesions may have some

scale. It frequently appears suddenly after an upper respiratory infection (URI).

- Inverse psoriasis occurs on the flexural surfaces, armpit, groin, under the breast, and in the skin folds and is characterized by smooth, inflamed lesions without scaling.
- Pustular psoriasis presents as sterile pustules appearing on the hands and feet or, at times, diffusely, and may cycle through erythema, pustules, and scaling.
- Erythrodermic psoriasis presents as generalized erythema, pain, itching, and fine scaling.
- Scalp psoriasis affects approximately 50% of patients, presenting as erythematous raised plaques with silvery white scales on the scalp.
- Nail psoriasis may cause pits on the nails, which may develop yellowish color and become thickened. Nails may separate from the nail bed.

- Psoriatic arthritis affects approximately 10% of those with skin symptoms. The arthritis is usually in the hands, feet, and, at times, in larger joints. It produces stiffness, pain, and progressive joint damage.
- Oral psoriasis may present with whitish lesions on the oral mucosa, which may appear to change in severity from day to day. It may also present as severe cheilosis with extension onto the surrounding skin, crossing the vermillion border.

Causes

- Lesions of psoriasis are caused by an increase in the turnover rate of dermal cells from the normal 23 days to 3-5 days in affected areas.
- Silver scale on the surface of lesions is a layer of dead skin cells and may be scraped away from most lesions even if the scale is not apparent on visual inspection.
- Patients with psoriasis have a genetic predisposition for the disease.

- Gene locus has been determined.
- The trigger event may be unknown in most cases but is likely an immunologic event.
- Commonly, the first lesion appears after an upper respiratory infection, such as streptococcal pharyngitis.
- Perceived stress can cause exacerbation of psoriasis. Some authors suggest that psoriasis is a stress-related disease and offer findings of increased concentrations of neurotransmitters in psoriatic plaques.
- Autoimmune function
 - Significant evidence is accumulating that psoriasis is an autoimmune disease.
 - Lesions of psoriasis are associated with increased activity of T cells in underlying skin.
 - Guttate psoriasis has been recognized to appear following certain immunologically active events, such as streptococcal

pharyngitis, cessation of steroid therapy, and use of antimalaria drugs.

- Superantigens and T cells
 - Psoriasis is related to excess T-cell activity. Experimental models can be induced by stimulation with streptococcal superantigen, which cross-reacts with dermal collagen. This small peptide has been shown to cause increased activity among T cells in patients with psoriasis but not in control groups.
 - Some of the newer drugs used to treat severe psoriasis directly modify the function of lymphocytes.
 - Also of significance is that 2.5% of those with HIV develop psoriasis during the course of the disease.

DIFFERENTIALS

Dermatitis, Atopic

Dermatitis, Contact

Gout and Pseudogout

Pityriasis Alba

Pityriasis Rosea

Reactive Arthritis

Syphilis

Tinea

Other Problems to be Considered

Seborrheic dermatitis

Diaper dermatitis

Onychomycosis

Squamous cell carcinoma

Nummular eczema

Lichen planus

Lichen simplex chronicus

Mycosis fungoides

Subcorneal pustulosis

Pustular eruptions

WORKUP

Lab Studies

- Test for rheumatoid factor (RF) is negative.
- Erythrocyte sedimentation rate (ESR) is usually normal.
- Uric acid level may be elevated in psoriasis, causing confusion with gout in psoriatic arthritis.
- Fluid from vesicles or pustules is sterile with lymphocytic infiltrate.
- Perform latex fixation test.
- Perform fungal studies.

Imaging Studies

- Radiographs of affected joints can be helpful in differentiating types of arthritis.
- Bone scans can identify joint involvement early.

Procedures

- Although most cases of psoriasis are diagnosed clinically, some, particularly the pustular forms, can be difficult to recognize. In these cases, dermatologic biopsy can be used to make diagnosis.

TREATMENT

Emergency Department Care

- Patients with guttate, erythrodermic, or pustular psoriasis may present to the emergency department.
 - In each of these cases, restoration of the barrier function of the skin is of prime concern. This can be performed with cleaning and bandaging.
 - Plaque and scalp lesions are frequently encountered in patients seeking care for other problems, and initial treatment of the lesions should be offered.
 - Solar or ultraviolet radiation may be helpful.
 - Oatmeal baths may be helpful.

Consultations

This disease is a chronic problem, and consultation for follow-up with a dermatologist or rheumatologist is appropriate.

- Psoriatic lesions on the palms are especially debilitating and require consultation.
- Patients with infectious diseases and psoriasis may be using drugs that modify immunologic response and render them immunocompromised. Investigation into the type of therapy is important and if such an agent is identified, referral and close follow-up is needed.

MEDICATION

Many drugs that affect the rate of production of skin cells are used in psoriasis therapy alone or in combination with light therapy, stress reduction, and climatotherapy. Adjuncts to treatment include sunshine, moisturizers, and salicylic acid as a scale-removing agent. Generally, these therapies are used for patients with less than 20% of body surface area involved, unless the lesions are physically, socially, or economically disabling.