Seborrheic dermatitis: a review of the most common chronic inflammatory skin disorder

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Abstract

Seborrheic dermatitis is a common chronic inflammatory skin disorder, affecting the scalp, face (FSD), chest, back, axilla and groin. This condition appears in infants (ISD), adolescents, and adults (ASD). Occurrence of seborrheic dermatitis is more in children between three months of age and people having immunodeficiency. The characteristic symptoms of seborrheic dermatitis include scaling, erythema, inflammation and itching. Pathophysiology of seborrheic dermatitis thought to result of several factors such as, stress response, hormonal effect, sebum gland activity, fungal infection (*Malassezia* yeast), cold and dry weather, viral and neurological diseases and certain medical conditions. The prevalence of seborrheic dermatitis is about 2%-5% worldwide in general adult population, while its prevalence is more in infants than adults and more on males than females. Diagnosis is done by normally reviewing the site of infection but several differential diagnosis procedures are done to confirm the disease. The treatment of seborrheic dermatitis is done by using "topical antifungals, calcineurin inhibitors and corticosteroids". Antifungals such as ketoconazole 1% or 2% and shampoos containing selenium sulphide, zinc pyrithione, or coal tar are effective against seborrheic dermatitis. In severe conditions "anti-inflammatory agents such as corticosteroids and calcineurin inhibitors should be used only for short duration". As seborrheic dermatitis is a chronic condition continuous treatment is done to reduce the symptoms.

Keywords: Seborrheic Dermatitis; Immunodeficiency; Inflammation; *Malassezia;* Corticosteroids; Calcineurin Inhibitors; Ketoconazole; Selenium Sulphide; Zinc Pyrithione; Antifungals; Dandruff; Sebaceous Gland; Epidermal Barrier

Introduction

Seborrheic dermatitis (SD) is the most common chronic inflammatory skin disorder. It occurs in areas rich in sebum production i.e. particularly the scalp, face and body folds [1]. All age group i.e. new-borns, infants and adults can be affected by SD. SD is severe in males than in females due to androgen hormones and also by emotional stress [2,3]. It is maximum in infants in the first three months of life i.e. 70% [4]. SD occurred in 1%-5% of population worldwide. In Asia, the occurrence of SD was reported between 2%-7% and 26.5% of people having age of 12-20 years [5].

On the basis of age SD can be infantile (ISD) and adult (ASD). ISD is more common but less effective found mostly in scalp. SD can be associated with HIV infection (increasing to 30%-83%) and "neurologic diseases (e.g., cerebrovascular event, Parkinson disease)" [6]. SD is more severe in winter season or in cold and dry climate and in high mental and emotional stress [7].

Etiology

The etiology of SD is not clearly identified but it seems to be occurred by multiple factors such as fungal infections, hormone levels, viral diseases, nutritional deficits, neurogenic factors and in several health conditions.

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