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Case Report

CASE REPORT ON ORAL CORTICOSTEROIDS [DEFLAZACORT] INDUCED MALASSEZIA FOLLICULITIS

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Abstract

Malassezia folliculitis is most commonly underdiagnosed by acne and malassezia folliculitis is caused by yeast of Malassezia, which is the cause of tinea versicolor. Malassezia folliculitis [MF] is also called pityrosporum folliculitis. It is a condition that shows breakouts on your skin, people who are mostly oily. People mostly think that it as a normal acne and try to treat them which is been misdiagnosed. It is mostly treated by the anti-fungals like itraconazole, fluconazole ,ketoconazole. It can be resolved within few weeks. Drug must be maintained; otherwise it may lead to reoccurrence of the infection.

Keywords: Malassezia folliculitis, tinea versicolor, pityrosporum folliculities, ketoconazole.



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INTRODUCTION

Malassezia folliculites is to be the natural part of the skin flora which is commonly caused by the yeast fungus. Malassezia which is the genus name and it is composed of 14 different species names [1]. Yeast fungus is also associated with the varieties of the skin disease like pityriasis [tinea] versicolor, psoriasis, neonatal cephalic pustulosis, seborrheic dermatitis, onychomycoses, acne vulgaris, transient acantholytic dermatosis, atopic ecema /dermatitis syndrome, malassezia folliculitis, systemic

infections in rare cases Malassezia folliculitis is also known for pityrosporum which is an acneiform eruption ,weary et al in 1969 described it primarily and later it was recognized by the potter in 1973 by a specific disease [2-6]. This is mostly underdiagnosed by the acne vulgaris [4-8]. Some of the factors contributing the malassezia are age and hormonal therapy [9-12]. It is mainly found in adolescence who are more prone to the oily skin and are more commonly seen in men and adolescence [3,13]. They are mainly found in face ,head , trunk

and mainly occurs to the oily skin [5,14]. It is commonly found in the peoples who live in the areas of hot and humid climates [14-16] and some times it is caused due to decreased immunity. Due to hormonal changes also those are seen and also by the use of corticosteroids, malnutrition and increased cortisol levels [17]. The risk factors of the malassezia folliculitis are immunosuppression, diabetes, broad spectrum antibiotics, steroids, puberty, pregnancy and cosmetics, lotions, emollients, olive oil which cause occlusion of the skin [18-23]. People who have pityrosporum folliculitis are sometimes more likely to have other conditions like dandruff, which is also known as seborrheic dermatitis. The difference between acne and the malassezia folliculitis is that the MF is itchy than that of the acne, as acne is not. Small bumps called pustules are found on your skin in the affected area. These pustules are focused on a hair follicle. These bumps tend to be very itchy.

Malassezia found within the walls of the arteries which contained lipid deposits. Malassezia folliculitis mostly thrives in the human lipid called sebum, it is the complex of the lipid mixture. It mainly consists of the triglycerides, fatty acids, wax esters, sterol esters, cholesterol, cholesterol esters and squalene. They break the sebum down into triglycerides and esters, diglycerides, monoglycerides and free fatty acids. This leads to the formation of the dandruff which people notice dry flakes skin on the other parts of the body besides scalp. Epidermis is the dense and it is outer layer of the skin. There are three groups of filament forming fungi that infect keratinized and cornified layers of the skin, nails and hair. They are candida albicans, trichophyton and malassezia. Both the candida and malassezia are considered commensal flora and the epidermal yeast form which doesn't alert the immune system because they are formed from the similar lipases and proteases to live in the humans. More often it is treated by the azole anti fungals or selenium sulphide lotions. It can be treated within 8 weeks if it is maintained the usage of the drug otherwise there may be a chance of rebound of it. Topical medication like creams and shampoo are also used. For the malassezia folliculitis dermatologist suggest mostly oral or topical anti-fungals. They suggest the oral medications to prevent it from reinfection or reoccurrence. It may be caused by the some of the antibiotics, oral contraceptives, oral corticosteroids like prednisolone, deflazacort, use of the

immunosuppressive drugs such as cyclosporine and azathioprine, increased plasma levels of cortisol and malnutrition. Discontinue the medications like antibiotics and corticosteroids which cause malassezia folliculitis.

CASE REPORT

A female patient of age 24 yrs was been admitted in KGH due to chief complaints of swelling of feet, unable to walk, unable to lift her right shoulder due to pain and morning stiffness. She has a past medical history of asthma since 10 yrs, discectomy [L5-S1] in 2019 and arthritis since 10 months and her past medication history was hcq 200mg, deflazacort 18 mg, folic acid OD, mtx 15 mg once weekly. she was been diagnosed by UCTD [Undifferentiated Connective Tissue Disorder] and her dose of deflazacort was been increased to 30 mg, methotrexate of 20mg once weekly, hcq of 300mg PO OD. After 4 days of this treatment the patient developed small bumps or papule on her face neck and back and the patient is able walk on the day 5 onwards.



Fig 01: Malassezia Folliculitis on cheeks



Fig 02: : Malassezia Folliculitis on back

DISCUSSION

Malassezia folliculitis is a fungal skin disease whose mechanism is unclear and mainly it is occurred by the activation of t-helper 2 cells which leads to the production of inflammatory cytokines via Toll-like receptor 2 [TLR 2] and production tumor necrosis factor [TNF]- α along with anti-inflammatory cytokines IL-4 and IL-10 [24]. which binds to the allergens which leads to mast cell activation and histamine release in the body. This last mechanism is supported by the presence of an increased number of NK1+ and CD16+ cells within biopsies from lesional skin [4,25]. In this patient, malassezia folliculitis occurred by mainly two reason :low immunity and usage corticosteroids for long days with a sudden increase in the dose. For the compensation of the reaction by the steroids they gave ketoconazole ointment. It must is maintained till the 8weeks to prevent the reoccurrence of the condition. It is primarily mistaken by the more age pimple due to hormonal changes but later it got clear when it spread to the neck and the back.

CONCLUSION

Malassezia folliculitis is not easily known because it is same as the sweat rash ,acne. When it is closely monitored it can be known and it is different from that of the acne. *Malassezia* folliculitis can be the drug induced such as oral or systemic corticosteroids, antibiotics and use of immunosuppressive drugs like cyclosporine and azathioprine. It can be treated by the azole anti-fungals and most commonly ketoconazole is used rather than other azole anti-fungal like itraconazole and fluconazole.

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