



DERMA TODAY

Volume1 | Issue 8 | 2020

Dear Doctor,

Greetings from Micro Labs. We are happy to bring you "**Derma Today**" which contains latest and interesting news in the field of Dermatology.

This issue contains:

1. Are patients with psoriasis and superficial fungal infections more vulnerable to COVID-19?
2. Today's Pick: Lichen Planopilaris in Patient Treated With Bexarotene for Lymphomatoid Papulosis.

Should you require any article or, medical information, please feel free to contact us
medicalservices@microlabs.in

Looking forward to your valuable feedback.

Best Regards,

Medical Team, Micro Labs Limited.





Are patients with psoriasis and superficial fungal infections more vulnerable to COVID-19?

Background:

The novel coronavirus, SARS-CoV-2, first started from Wuhan, China, which causes COVID-19. It has rapidly spread across countries & a pandemic was declared on March 11, 2020. The number of COVID-19 has been on the rise ever since then. Some patients with COVID-19, presented to the dermatology outpatient department before and during the pandemic. Recent studies have focused on comorbid conditions of COVID-19. Current studies indicate that numerous diseases including lung disease, cardiovascular disease, and immunosuppression are at higher risk for severe attack of COVID-19.

A study from Wuhan, China of 140 patients admitted to the hospital with COVID-19 reported that 30% had hypertension & 12% had diabetes mellitus as comorbid diseases.

Aim:

This study was aimed at investigating the probable relationship between comorbid dermatological conditions with COVID-19.

Materials and methods:

This was a retrospective study conducted by analysis of previous dermatological comorbidity of 93 patients who had COVID-19 who had presented to dermatology outpatient clinic.

It was done in the Uşak Training and Research Hospital, in Turkey by retrospective analysis of the data for last three years. Patients were segregated into 3 groups: patients who presented to the dermatology outpatient clinic in the past 3 months, 1 year, and 3 years before they were diagnosed with COVID-19.

The most common dermatologic diseases of all these three groups were looked into. This data was analyzed using SPSS 20.0 program, Descriptive statistics (frequency and percentages. While numerical changes are shown as mean $\pm$ standard deviation in a normal distribution).

Results:

93 COVID-19 patients were studied. Amongst them, there were 51 males and 42 females whose mean age were 55.28 ± 19.32 years. 6 of them were in intensive care and 4 of them became exitus.

The most common dermatologic diseases in patients who had COVID-19 who had dermatological conditions over last 3 years were: 25.8% of the study population had superficial fungal infections, 11.8% of the study population had seborrheic dermatitis,



10.8% of the study population had actinic keratosis, 6.5% of the study population had psoriasis and 6.5% of the study population had eczema.

52 patients who had COVID-19 also had dermatologic diseases in the last year. The most common dermatologic conditions these patients had were: superficial fungal infections (21.2%), seborrheic dermatitis (13.5%), actinic keratosis (11.5%), psoriasis (9.6%), herpes simplex (5.8%), eczema (5.8%).

17 COVID-19 patients were present, who presented to dermatology outpatient clinic over the last three months. Their median age was 58 years. They mostly presented in the dermatology out-patient clinic with superficial fungal infections (25%), psoriasis (20%), and viral skin diseases (15%).

The age of COVID-19 patients who presented to dermatology outpatient clinic for the last three years

Diagnosis	Age		
	Minimum	Maximum	Median
Superficial fungal infections	27	83	66
Seborrheic dermatitis	17	75	47
Actinic keratosis	60	90	75.5
Psoriasis	31	71	58.5
Herpes simplex	18	81	54
Eczema	35	87	54

The clinical and demographic characteristics of the COVID-19 patients who presented to the dermatology outpatient clinic in the last three months

Number	Age	Gender	Diagnosis	Current position
1*	35	M	Contact dermatitis	Discharged
2	79	W	Actinic keratosis	Exitus
3	30	M	Anogenital warts	Discharged
4	18	M	Herpes simplex	Discharged
5	28	M	Ichthyosis vulgaris	Discharged
6	58	M	Contact dermatitis	Exitus
7	70	M	Xerosis cutis	Discharged
8	59	M	Molluscum contagiosum	Discharged
9**	47	W	Psoriasis	Admitted
10**	58	M	Psoriasis/Tinea cruris	Discharged
11	60	W	Psoriasis/tinea corporis	Discharged
12	71	M	Psoriasis	Discharged
13	68	W	Seborrheic dermatitis/Actinic keratosis	Discharged
14	40	W	Cellulitis	Discharged
15	62	M	Tinea unguinum	Admitted
16	80	W	Tinea cruris	Exitus
17	27	M	Tinea unguinum	Discharged

* The patient was received intramuscular steroid one month before diagnosed with COVID-19.

**Patients were received methotrexate treatment.

M: Man W: Woman

Conclusion:

The possible similarity between cutaneous and mucosal immunity and immunosuppression suggests that patients with some dermatologic diseases especially superficial fungal infections and psoriasis may be more vulnerable to the COVID-19

Reference: Kutlu Ö, Metin A. Dermatological diseases presented before COVID-19: Are patients with psoriasis and superficial fungal infections more vulnerable to the COVID-19? Dermatologic Therapy. 2020 May:e13509

Today's Pick

Lichen Planopilaris in Patient Treated With Bexarotene for Lymphomatoid Papulosis

A 35-year-old woman presented with recurrent pruritic papular eruptions on the flank, axillae and groin. The history is of several months' duration. The lesions were 2-mm, flat-topped, violaceous papules. She was taking 3000 mg/d of omega-3 fatty acids.

Histopathologic examination of biopsy specimen from the inner thigh demonstrated enlarged, atypical, dermal lymphocytes that were CD30+ suggesting lymphomatoid papulosis (fig A). She has history of tubal ligation several years before, she was on oral bexarotene 300 mg OD with triamcinolone cream 0.1% twice daily. Six months later the patient presented with a new central patch of scarring alopecia on the vertex of scalp. (Fig B) Adjacent to which were areas of prominent perifollicular violaceous scale. Punch biopsies of the scalp were suggestive of dermal scarring with perifollicular lamellar fibrosis surrounded by a rim of lymphoplasmacytic inflammation: suggestive of cicatricial alopecia (Fig C)

Baseline fasting triglycerides: 123 mg/dL, stable over first 4 months on bexarotene. After 5 months triglycerides increased to 255 mg/dL, corresponding with onset of Lichen planopilaris (LPP). She was treated for hypertriglyceridemia with omega-3 fatty acids, leading to



Fig B. Patch of scarring alopecia with perifollicular erythema

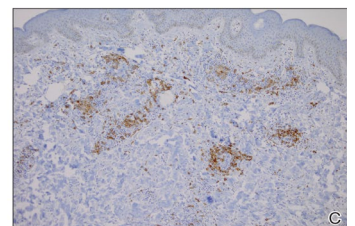
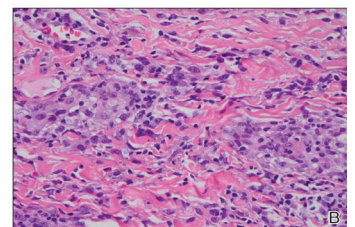
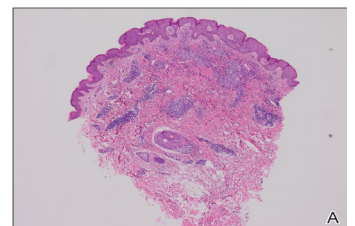


Fig A. Histologic findings from a biopsy of the inner thigh. A, A superficial and deep, wedge-shaped lymphoid infiltrate was observed in the dermis (H&E, original magnification $\times 40$). B, Highpower view showed a mixture of enlarged atypical lymphoid cells admixed with lymphocytes, histiocytes, and eosinophils (H&E, original magnification $\times 400$). C, CD30 immunohistochemical stain highlighted an increase in CD30+ lymphoid cells arranged singly and in clusters (original magnification $\times 200$)

normalisation of triglyceride levels. Her alopecia is persistent. She has central hypothyroidism due to bexarotene and is on levothyroxine.

The lymphomatoid papulosis also remains stable with no signs of progression to cutaneous T-cell lymphoma. Hyperlipidemia is the most common side effect of oral bexarotene. Taking into consideration: the insights on role of lipid regulation on LPP pathogenesis, it can be suspected that dyslipidemia caused by bexarotene may have triggered the onset of LPP. In this case, an interaction between lipid dysregulation and the development of LPP may be suspected.

Reference:

Sean Dreyer. Cutis. 2020 April;105(04):E19-E21

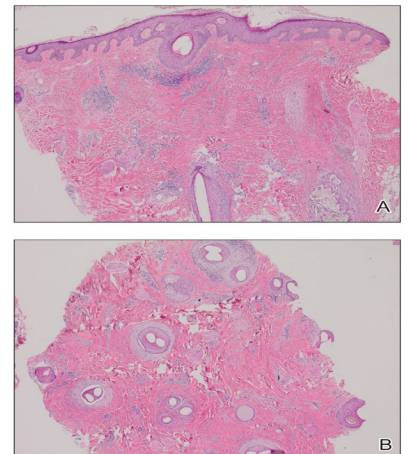


Fig C..Histologic findings from a biopsy of the vertex of the scalp. A, Vertical section showed dermal fibrosis and perifollicular chronic inflammation (H&E, original magnification $\times 40$). B, Horizontal section showed follicular dropout, perifollicular fibrosis, and perifollicular lichenoid inflammation (H&E, original magnification $\times 40$).



This scientific input is prepared from the Department of Medical Services, an initiative of M/s Micro Labs Limited under the aegis of Micro Knowledge Academy. The information contained herein is for education purpose only. The content is developed by compiling information from various authentic and published literatures. Although great care has been taken to assure the accuracy of the publication, M/s Micro Labs Limited shall not be responsible or in any way liable for any inaccuracy, errors, or omissions resulting from negligence or otherwise howsoever or any consequences arising there from. In spite of best efforts, the information in this publication may become outdated over time. M/s Micro Labs Limited shall not be responsible in any manner whatsoever, for any action taken, opinions expressed, advice rendered or accepted, any direct, incidental, special or consequential loss and damage caused on the basis of any material or information presented in this publication / update