

# EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

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<u>Case Study</u> ISSN 2394-3211 EJPMR

## PERNIOSIS AFFECTING THIGHS: AN ATYPICAL PRESENTATION

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Article Received on 12/04/2024

Article Revised on 02/05/2024

Article Accepted on 22/05/2024

#### **ABSTRACT**

Perniosis or chilblains is a condition caused by continued exposure to cold temperature leading to localised inflammatory lesions. Wind and dampness also contribute to its etiology. There seems to be role of cold and minor trauma leading to abnormal vascular response. It usually affects fingers, toes and ears. But rare cases of involvement of bottocks, calves and thighs have been described in literature especially in young female horseriders during winters. Perniotic lesions usually resolve in 1 to 3 weeks.

**KEYWORDS:** Wind and dampness also contribute to its etiology.

#### INTRODUCTION

Perniosis is caused by continued exposure to cold temperature, which leads to localised inflammatory lesions. Wind, dampness, cold and minor trauma may also contribute to abnormal vascular response. Lesions usually involve fingers, toes and ears. Perniosis of the thighs and buttocks was described at first by Haxthausen as "erythrocyanosis crurum puellaris". The following case report describes perniosis of thigh, which is somewhat under-recognised entity. High suspicion during winter months is important for its diagnosis and treatment.

### CASE REPORT

A 51-year-old male confectioner presented to Dermatology OPD with chief complaints of red, flat to raised lesions on thighs associated with pain and burning sensation for last 2 weeks. The lesions were recurrent

since last three years and only appeared in winter months. Patient was a non-smoker. He was not on any medications.

On examination, the skin on medial thighs and legs had well defined, discrete to confluent erythematous papules plaques with ulceration in some lesions. The old lesions had dusky hue. On deep palpation, plaques were tender and indurated. On the basis of history and examination, perniosis of thigh and cold panniculitis were kept as differentials. So deep punch biopsy of one of the recent lesions was taken. On histopathological examination, there was edema of the papillary dermis with prominent perivascular and perifollicular lymphocytic infiltration. Patient was advised to wear lose and warm clothes and was treated with extended release nifedipine 20 mg BD and topical calcium dobesilate. He improved in next two weeks.





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Figures 1,2,3 and 4: Lesions on the skin on medial thighs and legs: well defined, discrete to confluent erythematous papules plaques with ulceration in some lesions.

#### DISCUSSION

Perniosis or chilblain occurs as a result of an abnormal reaction to cold ambient temperature. Perniosis of the thighs and buttocks was described at first by Haxthausen as "erythrocyanosis crurum puellaris". Since then various case reports have been published. Perniosis usually starts after cold exposure for several hours and resolve gradually in 1-3 weeks. In some cases, it can be chronic due to repeated exposure to cold and other aggravating factors like tight clothing in equestrian type of chilblains. One previous clinical report described two young girls who developed hip perniosis during winter related to wearing tight-fitting jeans with a low waistband. Similarly, in our case only triggering factor was thin and tight clothing leading to perniotic lesions on thighs and legs.

Pathophysiology of chilblains is related to prolonged or intermittent cold exposure leading to vasoconstriction of cutaneous vessels, further causing hypoxemia and inflammation of vessel wall. Perniosis of thigh is somewhat under-recognised entity. High suspicion during winter months is important for its diagnosis and treatment.

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