REACTIVE PERFORATING COLLAGENOSIS MASQUERADING AS RHEUMATOID ARTHRITIS

Dear Sir.

A 50-year-old man, a coal miner by occupation, presented with complaints of pain in the large joints of his lower limbs for two years. It was associated with a gradually progressive deformity of the small joints of the upper limb, with pain and restriction of movements. The patient was being clinically treated for the past two years for rheumatoid arthritis. He also had nodular itchy eruptions on his palms, elbows and soles of the feet on both sides. No other significant past history was notable. Multiple nodules measuring 1.2 cm × 1.0 cm, firm in consistency and round shaped, were present at both the proximal interphalangeal joints of both hands. Finger deformities were present at both the proximal and distal interphalangeal joints (Figs. 1 & 2). Residual scarring was seen from previously healed lesions. No lesions were present on other parts of the body. Laboratory tests revealed a haemoglobin level of 9.3 mg/dl, with normal counts and a raised erythrocyte sedimentation rate of 58 mm in the first hour. Rheumatoid factor and anti-streptolysin O titre were negative, while the C-reactive protein was positive. Excision biopsy of the nodule with overlying skin showed that the epidermis was typically perforated by collagen bundles along mononuclear cell infiltrate in the epidermis, which was suggestive of reactive perforating collagenosis. The patient was relieved of his pain and pruritus after one week of steroid treatment and analgesic therapy. Residual finger deformities remained at completion of therapy.



 $\textbf{Fig. I} \ Photograph shows nodules on the proximal interphalangeal joints and palms.$



Fig. I Photograph shows finger deformities that are similiar to those observed in rheumatoid arthritis.

Reactive perforating collagenosis is a rare dermatological disorder that is histologically diagnosed by the transepidermal overlap of altered collagen through the epidermis. The diagnostic feature is focal damage of the collagen fibres, which leads to perforation of the disrupted collagen through the epidermis. Two varieties of this disease have been described: an acquired variety, which usually occurs in diabetics or patients with chronic kidney diseases; and a second variety whose cause is idiopathic. Other associations with systemic diseases, such as Hodgkin's lymphoma, have been recorded. Treatment of the lesions is often unsatisfactory. Anecdotal reports have described successful therapy with isotretinoin, allopurinol and doxycycline. Emollients and systemic antihistamines appear to be helpful in controlling the pruritus.

Yours sincerely,

Amit Dilip Bhatt Anjali Joshi Jyoti Jain Omprakash Gupta Department of Medicine

Mahatma Gandhi Institute of Medical Sciences

Sewagram

Wardha

Maharashtra 442102

India

Email: amitbhatt.md@gmail.com

REFERENCES

- 1. Tsuboi H, Katsuoka K. Characteristics of acquired reactive perforating collagenosis. J Dermatol 2007; 34:640-4.
- 2. Satchell AC, Crotty K, Lee S. Reactive perforating collagenosis: a condition that may be underdiagnosed. Australas J Dermatol 2001; 42:284-7.
- 3. Eigentler TK, Metzler G, Brossart P, Fierlbeck G. Acquired perforating collagenosis in Hodgkin's disease. J Am Acad Dermatol 2005; 52:922.
- 4. Pedragosa R, Knobel HJ, Huguet P, et al. Reactive perforating collagenosis in Hodgkin's disease. Am J Dermatopathol 1987; 9:41-4.
- 5. Yancovitz M, Johnson H, Wang N, Pomeranz MK. Perforating collagenosis. Dermatol Online J 2008; 14:14.
- 6. Querings K, Balda BR, Bachter D. Treatment of acquired reactive perforating collagenosis with allopurinol. Br J Dermatol 2001; 145:174-6.
- 7. Brinkmeier T, Schaller J, Herbst RA, Frosch PJ. Successful treatment of acquired reactive perforating collagenosis with doxycycline. Acta Derm Venereol 2002; 82:393-5.