Journal of Clinical Medicine and Research Vol. 2(9), pp. 156-158, September 2010
Available online http://www.academicjournals.org/JCMR
ISSN 2141-2235 ©2010 Academic Journals

Short Communication

Reactive perforating collagenosis

Deshmukh S. D.[1]*, Anand Mani[1] and Gokhale N. R.[2]

[1]Department of Pathology Smt. Kashibai Navale Medical College and General Hospital, Narhe, Pune. India.
[2]Department of Dermatology, Smt. Kashibai Navale Medical College and General Hospital, Narhe, Pune. India.

Accepted 05 July, 2010

Reactive perforating collagenosis is a rare cutaneous disorder of unknown etiology. We hereby describe this condition in a 22 year old lady who presented with slowly growing multiple erythematous papulonodular eruptions of size varying between 5-15 mm over the face, neck, trunk and extensor surfaces of the body.

Key words: Reactive perforating collagenosis, multiple erythematous.

INTRODUCTION

Reactive perforating collagenosis (RPC) has been recognized as an uncommon distinct dermatosis characterized by transepidermal elimination of altered collagen (Faver et al., 1994). The inherited form of the disease manifests in childhood, whereas acquired reactive perforating collagenosis occurs in adulthood (Faver et al., 1994; Yadav et al., 2009). We report a case of childhood onset RPC with a positive family history, for its extreme rarity, larger size of the lesions and the importance of differentiating it from other perforating disorders.

CASE REPORT

A 22 year old lady presented with hyper pigmented papulonodular eruptions over the entire body since the age of 12. The lesions were initially noticed over the back but gradually became generalized, and were associated with severe pruritus. There was no history of predisposing trauma, insect bite, cold intolerance, pregnancy, medication or any systemic disorder. Family history of such lesions was present in younger sister who developed these lesions since early childhood.

Physical examination revealed multiple erythematous, umbilicated papular lesions with central keratotic plug, ranging in size from 5 - 15 mm, moreover, the extensor surfaces of the body including the face, neck and trunk. The lesions exhibited various stages of evolution and regression. Few lesions exhibited linear pattern of arrangement indicating positive Koebner's phenomenon. Multiple hyper pigmented shallow scars were also observed (Figure 1). Systemic examination revealed no abnormality and the laboratory investigations were non-contributory.

Punch biopsy was taken from one of the lesions, which on routine processing and staining with hematoxylin and eosin, showed invagination of keratotic epidermis forming a channel. Within the channel basophically altered collagen bundles were noted. There were few inflammatory cells and proliferating capillaries around the lesion (Figure 2). Masson's trichome stain revealed fragmented collagen bundles. On this basis, a diagnosis of reactive perforating collagenosis (RPC) was offered.

According to the workers who first described this condition, RPC is an abnormal response to superficial trauma in which collagen causes irritation and perforation of the epidermis with transepidermal elimination (Mehregan et al., 1967). RPC occurs early in life, and both genders are equally affected (Naik et al., 2005). The lesions of acquired RPC may appear after trauma, folliculitis or cold exposure as well as in association with multiple disorders, which include diabetes mellitus, renal failure, hyper-parathyroidism, liver disease, neurodermatitis, IgA nephropathy, periampullary carcinoma with jaundice, adeno-carcinoma and liver neoplasms (Schmults, 2002). In our patient the above mentioned conditions were ruled out by a battery of relevant investigations. However, the patient is kept on follow-up for evidence of above disorders with regular laboratory

*Corresponding author. E-mail: drsanjay123in@yahoo.co.in. Tel: 9764008030. Fax: 91 20 24393884.

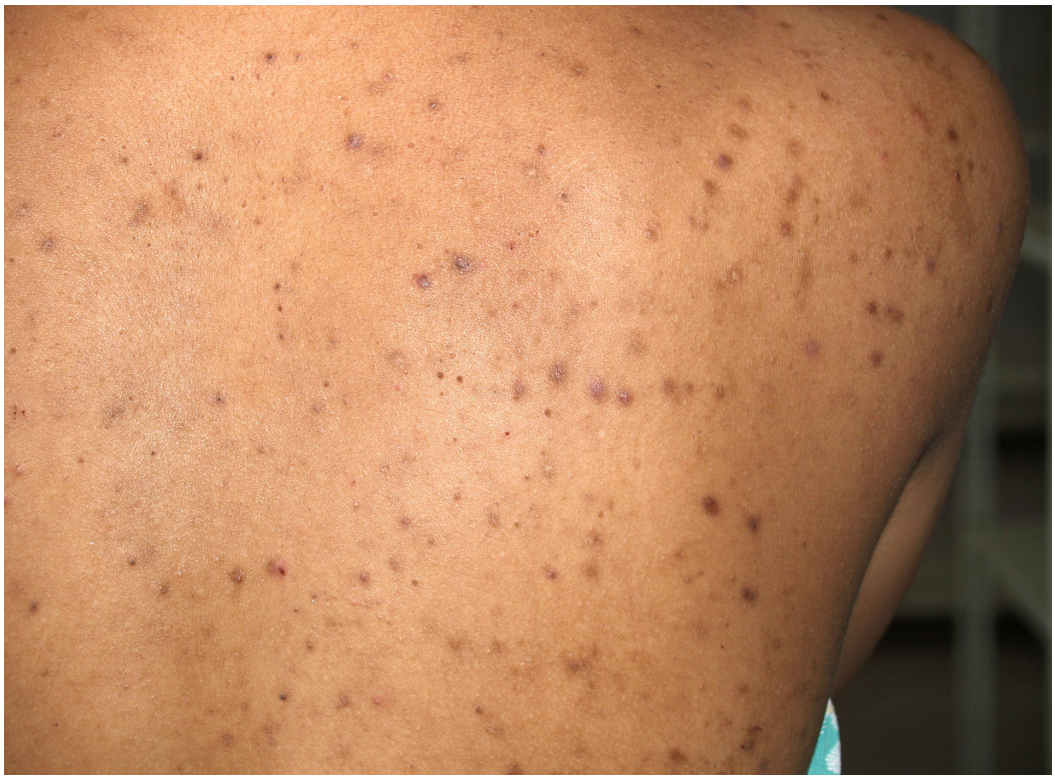

Figure 1. Clinical photograph showing multiple erythematous, umbilicated papular lesions on the back of the patient.

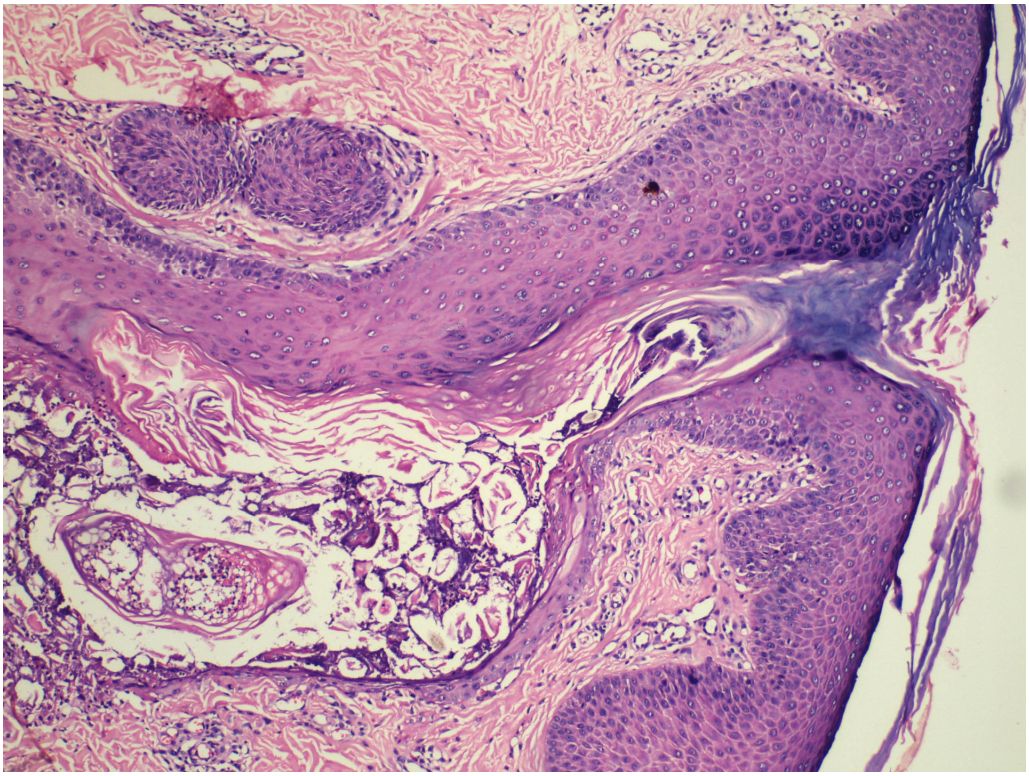

Figure 2. Photomicrograph showing invagination of keratotic epidermis forming a channel. Note altered basophilic collagen within the channel (H and E, x100).

analysis.

The various modalities of treatment include topical glucocorticoids, retinoids, keratolytics, systemic antihistamines, photochemotherapy, UVB phototherapy, liquid nitrogen cryotherapy and electric nerve stimulation (Schmults, 2002).

In our patient, the disease was controlled with systemic antihistamines and UVB phototherapy, within a period of 4 - 6 weeks.

REFERENCES

Faver IR, Daoud MS, Su WP (1994). Acquired reactive perforating collagenosis. Report of six cases and review of the literature. J. Am. Acad. Dermatol., 30: 575-580.

Mehregan AH, Schwartz OD, Livingood CS (1967). Reactive perforating collagenosis. Arch. Dermatol., 96: 277-282.

Naik NS, Nousari CH, Heilman ER, Friedman RJ (2005). Degenerative diseases and perforating disorders. Chapter 15. In: Elder DE, Elenitsas R, Johnson BL, Murphy GF (eds) Lever's histopathology of the skin, Lippincott Williams and Wilkins publishers, Philadelphia, pp. 403-417.

Schmults CA (2002). Acquired reactive perforating collagenosis. Dermatol Online. J., pp.8-8.

Yadav MK, Sangal BC, Bhargav P, Jai PR, Goyal M (2009). Reactive perforating collagenosis. Indian. J. Pathol. Microbiol., 52: 7-106.