# GENERALIZED UMBILICATED GRANULOMA ANNULARE

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Generalised umbilicated granuloma annulare is reported in an elderly man. There was no association of diabetes or other systemic disease.

Key words : Granuloma annulare, Umbilicated granuloma annulare

## Introduction

Granuloma annulare has been described in several morphologic forms i.e annular disseminated, subcutaneous, papular and perforating.[1] Although granuloma annulare is primarily a disease of children and young adults, it has been reported in virtually all age groups. Females are affected twice as often as males, and females are affected twice as often as males, and familial occurrence is rare.[2] No associated systemic sequelae are present, and laboratory evaluation is usually normal. Disseminated granuloma annulare is classified separately form the localised form because of the possible association with diabetes, a later age of onset, and rare spontaneous resolution .[3]

Therapy is usually disappointing. Various forms of therapies that have been reported to have a variable response are topical and intralesional steroids, dapsone, retinoids, niacinamide, chloroquine, colchicine, cryotherapy, electrodessication and X-ray therapy.[4] We have recently seen a patient with generalised umbilicated granuloma annulare and believe it to represent a distinct clinico-pathologic entity.

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## Case Report

A 58- year- old man presented with recurrent episodes of progressive, asymptomatic papular eruption since 7 years. The patient was in good health and denied any recent illness or ingestion of medications. There was no history of diabetes mellitus. On examination the eruption consisted of scattered, erythematous, dome shaped umbilicated papules ranging in size from 0.5 to1.0 cm. Some papules persisted to increase in size while some regressed spontaneously to leave behind pigmentation.

Initial laboratory examination revealed the following normal or negative results; complete blood cell count, erythrocyte sedimentation rate, liver and renal function tests, urinalysis and chest X-ray. Histopathological examination of the lesion revealed an ill-defined palisading granuloma around the superficial plexus and in the papillary dermis and a central focus of degenerated collagen in the deep dermis inflam-

matory infiltrate composed of histiocytes, eosinophils and lymphocytes was seen surrounding the necrobiotic collagen (Fig I). Careful serial sectioning failed to show any evidence of epidermal perforation, although there was epidermal thinning, loss of granular layer and parakeratosis.

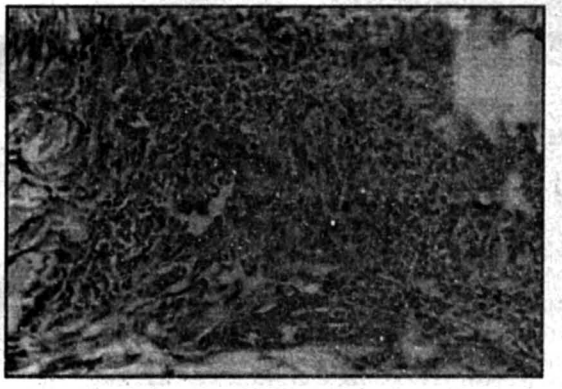

**Fig.1. Histopathology of granuloma annulare. Focus of degenerated collagen with an inflammatory infiltrate surrounding the necrobiotic collagen. (X 45)**

The patient was treated with long term dapsone, colchicine along with topical steroids which resulted in waxing and waning of the disease process but never total resolution.

## Discussion

Our case presented with a distinctive clinical pattern of asymptomatic, flesh-colored, firm papules with a central umbilication distributed over the extremities and the trunk. Histopathologically, the palisading granulomas with necrobiotic collagen and a mixed inflammatory infiltrate were distinctive and compatible with granuloma annulare. Epidermal thinning and parakeratosis were present directly over the focal collagen necrobiosis. However, deep serial sectioning through the blocks to look for transepidermal elimination of degenerated collagen failed to reveal any true perforation. Some authors have noted that, if serial histologic sections are not carefully cut, the actual perforation may be missed. However, even with multiple sections, transepidermal elimination has not always been documented.[1]

We propose that there is a spectrum from papular to perforating granuloma annulare, with perforating lesions representing a minority of cases.

Thus, we present this case of generalised papular form of granuloma annulare; the most striking feature of the disorder being central umbilication of papules, probably representing focal collagen degeneration. When this material is eliminated through the epidermis , a true perforating disorder ensues. In most cases, however, the necrobiotic material is not extruded and histopathologically, no perforation can be documented. Thus, we propose the term " generalised umbilicated granuloma annulare " as a more appropriate description for the disorder.

We present this case to alert clinician to the distinctive form of granuloma annulare that may be difficult to identify both clinically and histopathologically.

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