

Granuloma Annulare and Anterior Uveitis

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Granuloma annulare is a self-limiting cutaneous condition of unknown aetiology, causing necrobiotic dermal and subcutaneous papules. A number of conditions are associated with granuloma annulare, including lymphoma, anaemia, intestinal bleeding, seronegative arthralgia, vasculitis, and autoimmune thyroiditis. This report describes an unusual case of relapsing concomitant anterior uveitis and biopsy proven granuloma annulare. This combination is rare and this patient is the first to be reported in Iran.

Key Words: Granuloma annulare, Skin diseases, Uveitis

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Introduction

Granuloma annulare (GA) is a benign, idiopathic, inflammatory dermatosis characterised clinically by dermal papules and annular plaques. Several different clinical variants have been recognised: localised GA, generalised GA, subcutaneous GA, perforating GA, and arcuate dermal erythema.¹ Actinic granuloma is viewed by some authors as a subset of GA,² but others maintain it is a separate but related entity.³

Histology shows foci of degenerative collagen associated with palisaded granulomatous inflammation.⁴⁻⁶ Proposed pathogenic mechanisms include cell-mediated

immunity (type IV), immune complex vasculitis, and an abnormality of tissue monocytes, although there is no convincing evidence to support these hypotheses.⁷

Case Report

A 60-year-old man presented with blurred vision and right eye pain several months after the onset of a rash along his back, upper arms, and waist (Figure 1). His past medical and ocular history were non-contributory. A detailed review of constitutional symptoms was unremarkable.

Best-corrected visual acuity was 20/30 in the right eye and 20/20 in the left eye.

The ocular examination showed posterior synechiae in the right eye with 2+ cell and flare. No granulomatous keratic precipitates or iris nodules were noted. There were no vitreous cells, and no evidence of retinal vasculitis, chorioretinal infiltrates, or papillitis. Serology for autoimmune conditions, including human leukocyte antigen haplotyping, was negative. Punch biopsies of the subcutaneous nodules taken from multiple sites revealed collagen degeneration surrounded by epithelioid histiocytes and multinucleated giant cells, as well as increased extracellular mucin consistent with GA (Figure 2). Both the uveitis and skin lesions responded to initial therapy with topical and systemic steroids but relapsed during steroid tapering.

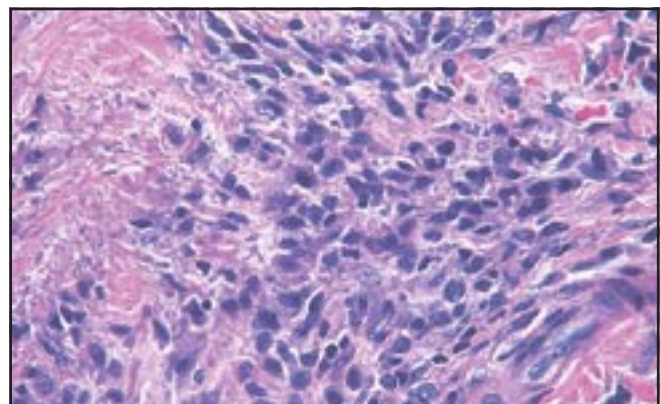
Discussion

This report describes a novel association between uveitis and a cutaneous exanthem. GA is a necrobiotic cutaneous condition with multiple disease associations. It is now suggested that GA, particularly in its association with autoimmune thyroiditis in females, belongs in the spectrum of autoimmune conditions.⁸ Many other disease associations have now been described, including anaemia,⁹ leukopenia,⁹ and vasculitis.¹⁰ The patient reported here did eventually develop profound anaemia with an undetermined aetiology. Given the

Figure 1. Dermal papules and annular plaques on the abdomen and trunk.



Figure 2. High-power magnification showing some of the spindle cells radiating around the periphery of the zone of altered collagen. (Haematoxylin and eosin; original magnification, x 40).



association of GA with lower intestinal bleeding as well as ileal and mesenteric elastotic granulomas,⁹ patients presenting with uveitis and rashes suggestive of GA should consider undergoing gastrointestinal studies such as barium enema and sigmoidoscopy.

Skin changes often direct the clinician to the accurate diagnosis of intraocular inflammation. The exanthems of lupus, rash of psoriatic arthritis, vitiligo of Harada's disease, and aphthous lesions of Behçet's disease are examples. These authors suggest that physicians treating uveitis become familiar with the distinctive cutaneous features of GA, and consider this association as part of their differential diagnoses. Further investigation, particularly for anaemia and gastrointestinal disease, is warranted.

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