

GRANULOMA ANNULARE ASSOCIATED WITH BLADDER MALIGNANCY

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ABSTRACT

Granuloma annulare is a granulomatous disorder of the dermis and subcutaneous tissue, with different clinical types. Generalised granuloma annulare is a rarely encountered clinical entity. We report a 65-year-old male with a 1-year history of generalised annular lesions who had papillary carcinoma bladder. To date granuloma annulare has not been described in association with carcinoma bladder.

KEYWORDS

Granuloma Annulare, Bladder Malignancy.

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INTRODUCTION

Granuloma Annulare is a benign granulomatous disease of unknown aetiology characterised by multiple erythematous and annular plaques with histopathological features of necrobiosis and palisading granulomas.^[1] Colcott Fox first described granuloma annulare (GA) in 1895.^[2] and in 1902 Radcliffe-Crocker labelled it as granuloma annulare.^[3] The clinical variants include localised, generalised, perforating and subcutaneous types. Here, we report a case of generalised granuloma annulare associated with carcinoma of urinary bladder.

CASE REPORT

A 65-year-old male presented to our institution with a six-month history of generalised annular lesions. The patient was diagnosed with papillary carcinoma of urinary bladder 1 year back, for which he underwent surgical management. Dermatological examination revealed generalised erythematous papules and annular plaques measuring 0.5 to 3 cm distributed over his trunk, upper and lower extremities. Sensation over the lesions were intact and examination of peripheral nerves was normal. Systemic examination was within normal limits.

Serological test for HbsAg, HCV, HIV, VDRL, Mantoux test and KOH mount for fungus were negative.

No significant changes were seen in renal, hepatic or thyroid function test. Serum glucose level was within normal limits. Chest x-ray and Ultrasonography of abdomen were found to be normal.



Fig. 1: Annular Lesions on Trunk



Fig. 2: Annular lesions with raised Border on Upper Limb

Histopathological examination showed normal epidermis; upper and mid-dermis show focal collagenolysis bordered by histiocytes, epithelioid cells and perivascular lymphocytes.

Based on clinical findings and histopathological examination, a diagnosis of generalised granuloma annulare was made. He was treated with topical steroid and the lesions showed improvement after one month.

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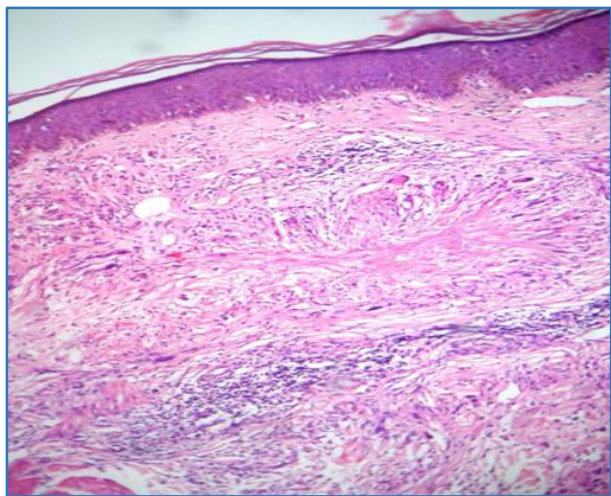


Fig. 3: Photomicrograph showing a Palisade of Histiocytes surrounding Degenerated Collagen and Mucin. Perivascular Lymphocytic Infiltration also seen

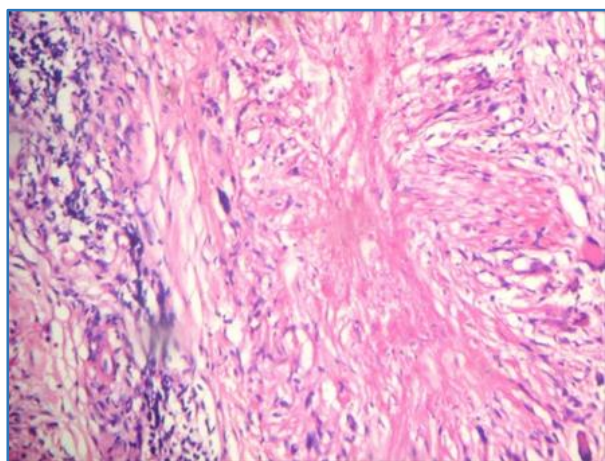


Fig. 4: Photomicrograph showing Palisading Histiocytes surrounding Degenerated Collagen with Multinucleated Histiocytic Giant Cells

DISCUSSION

Granuloma annulare is a granulomatous disorder, which is more common in females. The age of onset is usually less than 30 years. Several precipitating factors have been proposed, which include diabetes mellitus, malignancies, thyroid diseases, hepatitis B and C infections, medications and acquired immunodeficiency syndrome. A generalised form of granuloma annulare can occur in up to 15% of patients, and is characterised by multiple, asymptomatic, erythematous or skin-coloured plaques located primarily on neck, trunk and extensor surfaces of extremities. Generalised granuloma annulare is characterised by a later onset, poorer response to

therapy and increased prevalence of HLA-BW35 allele.⁽⁴⁾ Harman et al first reported an association of GA and malignancy in 1977.^[5] Later, in a series of 100 patients with GGA, Dabski and Winkelmann found 14 cases of internal malignancies preceding or following the skin eruption.⁽⁶⁾

The mechanism of the association between GA and malignancies is unknown. It is speculated that GA results from an immunologic reaction stimulated by an unidentified tumour antigen. These patients may have decreased cell-mediated immunity due to tumours. Tumour cells may directly or indirectly cause secretion of cytokines; cytokine activation of fibroblasts might produce an inflammatory reaction that mediates the formation of a granuloma.⁽⁷⁾

In most patients with malignancy, a diagnosis of cancer had previously been established, and the appearance of GA lesions was not temporally associated with detecting an underlying malignancy.^[8] Although uncommon, GA may be temporally associated with detecting a previously undiagnosed malignancy or recurrent metastatic disease, and resolution of the dermatosis may be temporally associated with successful treatment of that cancer.

Among the haematologic malignancies, malignant lymphoma has been commonly reported, but this is the first case in the literature of GGA with carcinoma of urinary bladder. In conclusion, GA with carcinoma of urinary bladder is rare and clinicians should be aware of underlying cancers, especially in elderly patients with GA.

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