

Generalised granuloma annulare: a case report

Jeneralize granüloma annulare: olgu sunumu

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ÖZET

Granüloma Annulare etiyojisi net olarak bilinmeyen nekrobiyotik bir hastalıktır. Lokalize, jeneralize, perforan ve subkutanöz formları bulunmaktadır. Jeneralize granuloma annulare, anuler şekilli, cilt renginde yada eritematöz görünümlü papüllerle karakterize olup ana yakınma kaşıntıdır.

Atipik semptomlarından dolayı tanı ve tedavide gecikme yaşamış olan nadir jeneralize granüloma annulare olgusunu sunduk.

SUMMARY

Granuloma annulare is a necrobiotic disorder of undisclosed etiology. The clinical variants include localized, generalized, perforating and subcutaneous types. Generalized granuloma annulare is characterized by derma-colored or erythematous papules in an annular configuration, with pruritus as a chief complaint.

Here, we report a rare case of generalized granuloma annulare who presented with unusual symptoms and had a delay in getting the correct diagnosis and treatment.

Anahtar Kelimeler: Jeneralize granuloma annulare, histopatoloji, ayırıcı tanı

Keywords: Generalized granuloma annulare, histopathology, differential diagnosis

INTRODUCTION

Granuloma annulare is a necrobiotic disorder of undisclosed etiology. The clinical variants include localized, generalized, perforating and subcutaneous types. Generalized granuloma annulare is characterized by derma- colored or erythematous papules in an annular configuration, with pruritus as a chief complaint.¹

CASE REPORT

A 57-year-old male patient who received various irregular treatments in external centers with similar complaints for a year and did not follow polyclinic appointments regularly. He had been hospitalized at another center for a month after that he was admitted to our center for treatment and detailed investigation because of an increase in the lesions, fever and weakness. Dermatological examination revealed angular shaped, papular lesions of 0.3 cm on both upper extremities distal to the upper half and back of the trunk, and erythema which was concentrated on legs especially around the knees. There was no clinical feature other than the history of diabetes and hypertension. [Figure 1]. A skin biopsy revealed acantosis, hypergranulosis and compact orthokeratosis in the epidermis, while a lymphohistiocytic interstitial infiltrate, with a profile of epithelioid granulomas, was identified in the dermis, permeating areas of partial degeneration of collagen fibers, together with a few multinucleated colossus cells engulfing degenerated elastic fibers [Figure 2-3]. There were no specific microorganisms in the sample. The lesions partially regressed after the biopsy and the remaining lesions were treated with high-potency topical corticosteroid, under occlusion, for a week.



Figure 1: Angular shaped, papular lesions of 0.3 cm on both upper extremities especially distal to the upper half and back of the trunk were seen on physical examination.

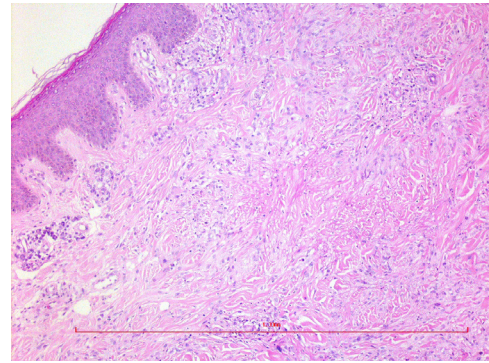


Figure 2: Histopathologic examination showed acantosis, hypergranulosis and compact orthokeratosis in the epidermis, while a lymphohistiocytic interstitial infiltrate, with a profile of epithelioid granulomas, were seen in the dermis. (HE, x100)

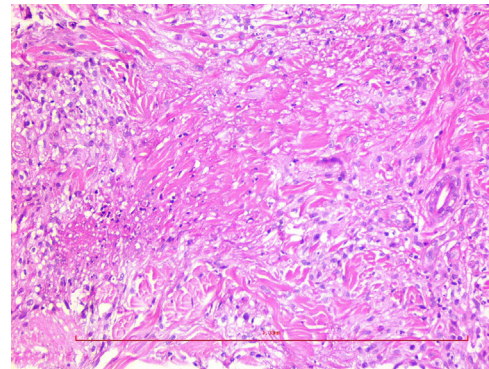


Figure 3: Permeating areas of partial degeneration of collagen fibers, together with a few multinucleated colossus cells engulfing degenerated elastic fibers are seen in this micrograph. (HE, x200)

DISCUSSION

Granuloma annulare correctly describes the classical variant of the disease, with erythematous annular plaques and granulomatous infiltrate when submitted to microscopy. Nonetheless, the disease encompasses a spectrum of clinical presentations, including the localized (most common), generalize, subcutaneous, papular, perforating, linear and patch forms.⁽²⁾

The pathogenesis of Granuloma Annulare, regardless of its clinical form, includes the presence of chronic vasculitis, the participation of lymphokines with the sequestration of macrophages and histiocytes in the dermis, delayed hypersensitivity reaction, defect in the chemotaxis of neutrophils and infections.⁽³⁾ Associations with diabetes, dyslipidemia, malignancies, infections, thyroid diseases and drugs are all reported in the literature, but they need further studies in order to be confirmed. Triggers, such as contact dermatitis, tattoos, and insect bites have also been described in the literature. ^(4,5) In our case routine investigations

and sistemic physical examination were unremarkable other than those for elevated blood sugars and high blood pressures. Patient didn't have any other sistemic illness's other than diabetes.

Generalized lesions occur in %10-15 of patients with Granuloma Annulare and the relationship with DM have been published (6) Also the possible association of GGA and human leukocyte antigen(HLA)-Bw35 has been reported. (7)

While subcutaneous lesions tend to occur more commonly in children, generalized form is mostly reported in elderly patients. (8)

On histomorphologic examination granulomatous inflammation with palisading or interstitial pattern is the major finding. Yun et al studied 54 patients and found that the 2 predominate histologic patterns were nearly equal in numbers (52% were characterized as palisading; 48% were characterized as interstitial). Mucin was seen in 94% of cases, an eosinophilic infiltrate in 44%, and nuclear dust in 33%. No vasculitis was seen. (9)

The palisading pattern shows degenerate (necrobiotic) collagen in the center, surrounded by palisading histiocytes and lymphocytes. The interstitial pattern shows hisiocytes and lymphocytes scattered randomly around the collagen bundles.(2) Based solely on histology, no specific findings were found to allow a diagnosis of GGA versus LGA.(10)

Other granulomatous disorders can mimic GA histologically. (2) Necrobiosis lipoidica, rheumatoid nodule, actinic granuloma, palisading neutrophilic and granulomatous dermatitis (PNGD), interstitial granulomatous dermatitis (IGD), interstitial granulomatous drug reaction (IGDR) and sarcoidosis must be ruled out clinically and histologically.

Rarely mycosis fungoides with a tissue reaction may be mistaken as granuloma annulare. The presence of interstitial lymphocytes with nuclear atypia and epidermotropism, a feature not seen in granuloma annulare, should resolve this differential diagnosis. (11) In conclusion, generalized granuloma annulare is a rare form of granuloma annulare and can be mistaken both clinically and histomorphologically. Clinical information and careful histologic examination are very important on getting the correct diagnosis.

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