

Clinical-Medical Image

Granuloma Annulare Masquerading as Hansen's Disease and Showing Reverse Koebner Phenomenon

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Clinical Image

An 80-year-old male presented to the department of Dermatology in October 2019 with multiple annular erythematous papules and few plaques over both upper limbs and the back. Patient had previously presented in April 2018 to a private practitioner with a large annular lesion on the right hand (Figure 1) since January 2017 and was started on multibacillary multidrug therapy for treatment of Borderline Tuberculoid Leprosy. However, while on treatment over the next one year, the lesion did not subside and he developed similar lesions over the other the contralateral shoulder and back (Figure 2). Examination revealed mildly reduced sensations over the lesions as compared to the healthy skin and bilateral thickening of the ulnar nerve, radial cutaneous nerve and cutaneous femoral nerve, clinical presentation thus mimicking Hansen's disease. A punch biopsy was obtained from the lesion on the back which showed microscopic features of granuloma annulare and no features of leprosy (Figure 3). When the patient returned for follow-up 2 weeks later, the lesions throughout the body had resolved (Figures 4 and 5).

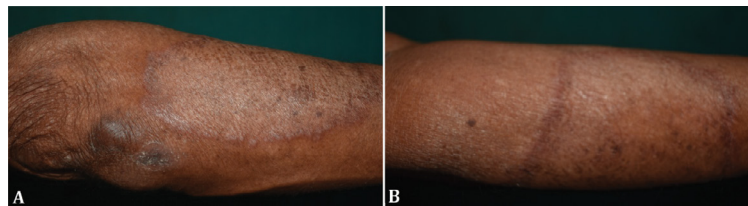


Figure 1: Single large annular papule on the dorsal (A) and medial (B) aspect of right hand (developed in January, 2017).

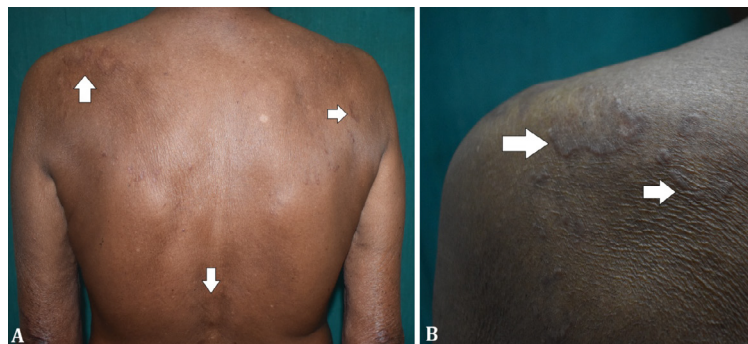


Figure 2: Multiple erythematous annular papules and plaques with raised edges also developed over the back (A) and left shoulder (B) in the subsequent year.

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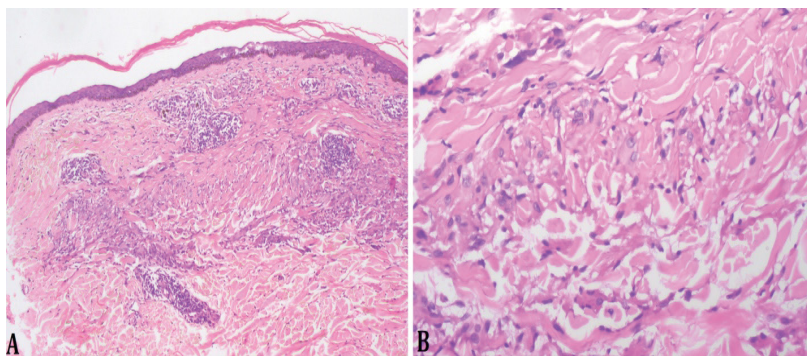


Figure 3: Histopathology of biopsy: A (H&E 40x) depicting inflammatory infiltrate in nodular and interstitial pattern and B (H&E 100x) depicting histiocytic infiltration in half palisading pattern suggestive of mixed type of Granuloma Annulare.



Figure 4: Resolution of lesion on the hand 2 weeks after biopsy was done.

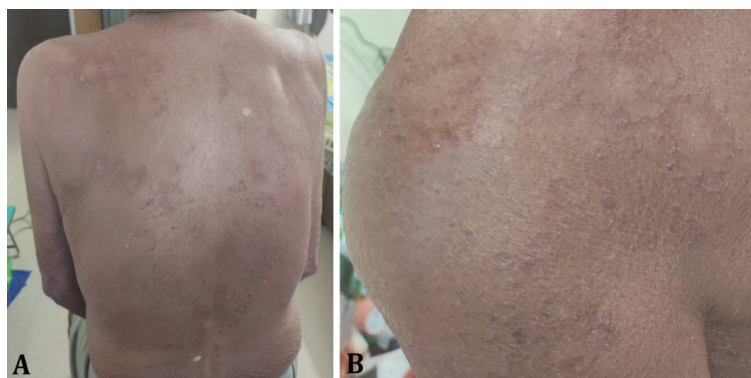


Figure 5: Resolution of lesion over the back (A) and shoulder (B) 2 weeks after biopsy was done.

Granuloma annulare is known to be a self-limiting, benign, necrobiotic disorder of unknown etiology. The clinical variants are localized, generalized, perforating, and subcutaneous patterns¹. Generalized granuloma annulare is a rare variant comprising of around 15% of all cases of granuloma annulare and presents as widespread papules which may further coalesce to form small annular plaques in some cases. Unlike in the localized variant, the trunk is frequently involved, in addition to the neck and extremities. It runs a protracted course². Most cases of granuloma annulare resolve spontaneously. Various types of trauma, including that of a biopsy, have been observed to initiate resolution of lesions³. In our patient, the lesions were present since almost 3 years and resolved within 2 weeks of performing a biopsy. Though natural resolution is a possible mechanism, biopsy as a triggering factor for resolution (Reverse Koebner Phenomenon) cannot be ruled out.

References

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