# Role of pentoxyphylline in generalized granuloma annulare- A case report

# Dr swati Shandilya

Department of dermatology, venereology and leprosy, SKN medical college, pune, Maharashtra, India

Submitted: 01-02-2023 Accepted: 10-02-2023

### ABSTRACT

A 45 year old women who presented with multiple annular erythematous plaque mainly on knees, elbow, back.

On examination multiple, well defined erythematous, annular, plaque with raised border and slight central clearing present bilaterally suggestive of generalized granuloma annulare

Skin biopsy showed foci of degenerated collagen in the dermis with histocytes and lymphocytes arranged in an interstitial pattern suggestive of granuloma annulare

#### I. INTRODUCTION

Granuloma annulare is a benign, usually self limiting, inflammatory skin disease.

Trauma, insect bite, viral infections and certain drugs are known triggers.

Pathogenesis- delayed type of hypersensitivity response and an immunoglobulin mediated vasculitis.

Histopathology- foci of degenerated collagen in dermis with histiocytes and lymphocytes arranged in interstitial pattern

#### II. **CASE REPORT**

A 50 year old female presented with multiple, reddish lesion over legs, knee, forearm, elbow without any associated symptoms

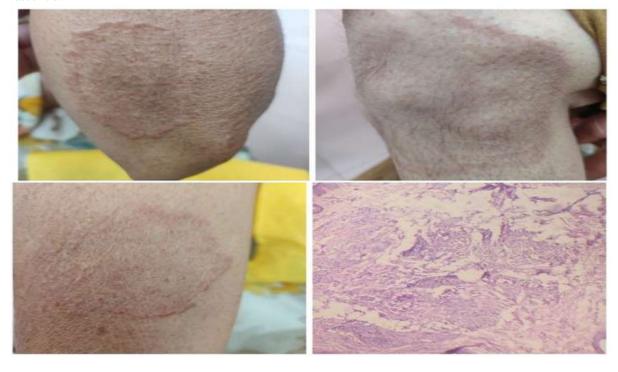
examinationmultiple, defined well erythematous, annular, plaque with raised border and slight central clearing present bilaterally suggestive of generalized granuloma annulare

Other routine investigations were normal

Skin biopsy confirmed the diagnosis of generalized Granuloma Annulare.

A trial of Tab pentoxyphylline 400mg thrice daily with emollient was given.

The patient was called to opd for follow up after 1 month.





Multiple annular lesions on elbow and thighs Biopsy showing foci of degenrated collagen in dermis

#### III. RESULTS

Patient responded in a month after giving pentoxyphylline.

The lesions disappeared and the patient did not complain of any side effects





#### IV. **CONCLUSION**

Pentoxyphylline is a phosphodiesterase inhibitor which is used in raynauds phenomenon, venous ulcers etc

Exact mechanism of action in granuloma annulare is not known but with its TNF alpha blocking action, inhibits macrophage activation and hence the granulomatous inflammation is reduced

## **REFRENCES**

- [1]. Burns DA. Necrobiotic disorders. In: Burns T, Breathnach S, Cox NH, Griffiths C, editors. Rook's text book of dermatology. 8th ed. Oxford: Wiley-Blackwell; 2010. p. 60.1-60.12. Back to cited text no. 1
- [2]. Garg S, Baveja S. Generalized granuloma annulare treated with monthly rifampicin, ofloxacin, and minocycline combination therapy. Indian J Dermatol2013;58:197-9. Back to cited text no. 2[PUBMED] [Full
- [3]. Naveen KN, Pai VV, Athanikar SB, Gupta G, Parshwanath HA. Remote reverse

- Koebner phenomenon in generalized granuloma annulare. Indian Dermatol Online J 2014;5:219-21. Back to cited text no. 3[PUBMED] [Full text]
- [4]. Dabski K, Winkelmann RK. Generalized granuloma annulare: Clinical laboratory findings in 100 patients. J Am AcadDermatol1989;20:39-47. Back to cited text no. 4
- Rubel DM, Wood G, Rosen R, Jopp-[5]. McKay A. Generalized granuloma annulare successfully treated with pentoxifylline. Australas J Dermatol 1993;34:103-8. Back to cited text no. 5
- Patrascu V, Giurca C, Ciurea RN, [6]. Georgescu CV. Disseminated granuloma annulare: Study on eight cases. Rom J MorpholEmbryol 2013;54:327-31. Back to cited text no. 6