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# **Unusual Skin Lesion in 35 Year Old Female**

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#### **ABSTRACT**

Introduction: One of the inflammatory skin lesions is Granuloma Annulare. Usually it is self limited.

**Aims and objectives**: The aim of our study was to histopathological examination of the lesion of the skin biopsy.

**Materials and Methods**: The study for the histopathological examination of skin lesion biopsy was done in the Department of Pathology, IPGMER, Kolkata.Result: The histopathological examination confirmed the clinical diagnosis of Granuloma annulare.

**Conclusion**: The Clinical and histopathological examination are needed for confirmation of the lesion.

**Keywords**: Histopatholigical examination, biopsy, Granuloma annulare.

## INTRODUCTION

Granuloma annulare is an inflammatory skin disease. It is usually self limited but most of the time treatment is needed. In this disease there are dermal papules of 1-2 mm and they are arranged in the annular fashion. The term Granuloma Annulare was introduced by Radcliff - Crocker in 1902 (1).

They may be Localized or generalized. Only one or a few lesions on a single anatomical site is considered as localized type. Dabski and Winkeiann defined generalized Granuloma annulare when trunk and either upper, lower or both limbs.(2). There are several clinical types of Granuloma Annulare e.g localized, generalized or disseminated, targetoid, giant, subcutaneous and perforating type. (3) Hundreds or thousands papules are found in generalised variety which comprises 15% of cases and lesions are found in forearm,neck,extensor surface of elbow (4). We are reporting a case of

Generalized Granuloma Anulare of a 35 year old female.

## **Case Report**

A female aged 35 year attended Dermatology OPD with the complaints of rashes all over the body. The rashes at first appeared in the lower limb. Gradually they started spreading all over the body. The rashes were arranged everywhere in a peculiar circular fashion. There was no itching, burning or any other difficulty from the rashes. Only problem was that they were spreading and visible on the exposed parts of the body. On examination there were multiple papules of 1-2 mm of size and most of them arranged in the form of circular fashion having 5mm to 10 mm diameter forming an elevated border with depressed center (Figure 1 and Figure 2). The lesions were not present on the face. They were present on neck, back upper limbs and lower limbs both on the extensor and flexor surface, chest and abdomen. The papules were

erythematous or skin colored. The lesions wre distributed symmetrically (Fig3 & Fig4). The general examination and systemic examination did not reveal any abnormality.

Routine blood examination, blood sugar, urea and liver function test was done. They were within normal limits. Her past history was unremarkable and there was no history of photosensitivity and was no history of food and drug allergy. She did not have any family history of skin lesion. Skin biopsy was done and sent to the Pathology Department. Routine processing was done. Paraffin block was made and sections were cut at 4 micron. The histopathological examination showed squamous hyperplasia and presence of histiocytes and chronic inflammatory cell in the subepithelial region. At places granuloma formation was also noted. The hisological features were consistent with Granuloma Annulare.

On the basis of Clinical and Histopathological examination the diagnosis of Granuloma Annulare was established. The patient was given oral steroid. The patient is doing well

#### **Discussion**

Granuloma Annulare is a chronic inflammatory skin lesion. It is seen in young adults usually within thirty years of age (5). In our case the age of the patient was 35 year. Most of the patients of previous studies were females (5). In our study the patient was female. Y.W. Cheng et al described the male to female ratio was 1.09:1 and most patients were older than 50 years (6).

The etiology of the disease is not fully known. It is a sporadic disease and occasionally seen in families and it is associated with HLA subtypes (7). Trauma, sunburn, Insect bite, BCG vaccination, upper respiratory tract infection, reaction to contrast media given intravenously, postoperative phlebitis, sepsis and stress can be the precipitating factors (6). Generalized disease is seen in 15% of the patients suffering from the disease. In generalized disease hundreds or thousands of lesions at least ten lesions are seen (8).Lesions is symmetrically distributed. In our patient numerous lesions were present and they were symmetrically distributed. The differential diagnosis are Tinea corporis, pityriasis rosea, pitriasis rotunda, psoriasis, erythema annulare centrifugum, nummular eczema, discoid lupus erythematosus,

necrobiosis lipoidica, morphea,hypertrophic lichen planus and erythema chronicum migrans and the lesion is self limited (7).

There is no definite evidence of association of Diabetes Mellitus with Granuloma Annulare. According to Y.W.Cheng et al the association with Diabetes Mellitus with this disease was 13.6% (6). In our case blood sugar level of the patient was normal. Some authors claim that dyslipidemia may occur in some cases of generalized Granuloma Annulare (9). This patient had normal lipid profile.

### **Conclusion**

Granuloma Annulare is an inflammatory skin disease. Clinical and histopathological examination are necessary for the diagnosis. It can be cured after treatment and some cases are self limited.

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Fig 1 – Skin lesion on back



Fig 2 – Lesions on front of chest



FIG 3 – Lesions on extensor surface of arm



FIG 4 – Lesions on external surface of forearm

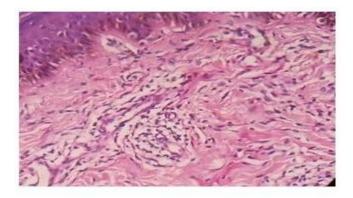


Fig 5 - Squamous epithelium and subepithelial inflammatory cell infiltration and collection of macrophages. H&E~400X