



A Observational Study on Hypopigmented \ Depigmented Macules in Geriatric Population Attending Dermatology OPD in a Tertiary Care Centre

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

This article lays out the common hypopigmented \depigmented lesions in geriatric population encountered in dermatology OPD in a tertiary care centre in India. Hypopigmented/depigmented lesions is commonly encountered in a dermatology OPD on a day to day basis. This study is an observational study carried out on 100 patients in dermatology OPD in a tertiary care centre who satisfied the inclusion criteria of age more than 60 years with hypopigmented or depigmented lesions. Hypopigmented/depigmented lesions have a great impact on patients aesthetic appearance leading to psychosocial impairment. A further research with larger sample size and longer study duration can help us understand hypomelanosis in geriatric population better.

Keywords: Depigmented lesions; geriatric population; hypomelanosis; melanocytes.

1. INTRODUCTION

Geriatric population suffer from a wide range of dermatoses. Over the years extensive studies are being done on skin changes in geriatric population [1]. Hypopigmented\depigmented lesions is commonly encountered in a dermatology OPD on a everyday basis [2]. There is paucity of data on geriatric dermatoses and there is little or no data available on hypopigmented\depigmented lesions in geriatric population [1]. Hypopigmentation\depigmentation of skin is due to reduction in number of melanocytes due to various underlying pathology [2]. With aging, the dermoepidermal junction flattens, leading to reduction in the number of melanocytes by 20% and gives pale look to the skin [2]. The social stigma behind hypopigmentation is the reason for a patient to visit a dermatologist. Adequate history, thorough cutaneous examination along with wood's lamp examination, dermoscopy and rarely a skin biopsy is needed to make the right diagnosis. Hence it is worthwhile to study about hypopigmented\depigmented lesions in the geriatric population.

This article lays out the common hypopigmented \depigmented lesions in geriatric population encountered in dermatology OPD in a tertiary care centre.

2. METHODOLOGY

This study is an observational study carried out on 100 patients in dermatology OPD in a tertiary care centre who satisfied the inclusion criteria of age more than 60 years with hypopigmented or

depigmented lesions. Patients aged less than 60 years were excluded. A thorough cutaneous examination with woods lamp examination, dermoscopy and skin biopsy have been performed wherever required.

3. RESULTS

- In this study, the patients belonged to 60 – 78 years of age
- Out of 100 patients, 62 patients were males and 38 females were females where the male to female ratio is 1.8:1
- Out of 100 patients 48 patients had idiopathic guttate hypomelanosis
- Out of 100 patients, 23 patients had vitiligo and among the 23 cases 9 cases were acrofacial vitiligo, 8 were multi segmental vitiligo, 4 cases were focal vitiligo, 2 cases were mucosal vitiligo
- Out of 100 patients, 18 patients had post inflammatory hypopigmentation, 7 due to underlying dermatoses like psoriasis, lichen simplex chronicus; 3 cases were due to phototherapy; 6 cases were drug induced, predominantly steroids; 2 cases were due to post traumatic leukoderma,i.e burns .
- Out of 100 patients, 4 patients were diagnosed to have scleroderma
- Out of 100 patients, 3 patients had tubercuoid leprosy, which were confirmed with biopsy
- Out of 100 patients, 2 patient had Polymorphous light eruptions
- Out of 100 patients, 2 patients had tinea versicolor.



Fig. 1. A case of tuberculoid leprosy confirmed with skin biopsy and slit skin smear



Fig. 2. A case of scleroderma



Fig. 3. A case of idiopathic guttate hypomelanosis

4. DISCUSSION

- Hypomelanosis can be caused due to a variety of reasons.
- The most common hypopigmented lesion in our study is found to be idiopathic guttate hypomelanosis, a benign, asymptomatic, leukoderma of unknown etiology. Histopathology features include decrease in melanocytes and electron microscopy shows decrease in melanosomes [3,4].
- Vitiligo is an autoimmune disorder leading to melanocytes destruction resulting depigmentation. There is an increase in the number of melanosomes on electron microscopy [3,5,6].
- Post inflammatory hypopigmentation is due to injury caused by inflammation and it usually resolves spontaneously over time [7,8].
- Leprosy is caused by Mycobacterium leprae affecting the peripheral nerves. The

tuberculoid pole usually shows hypopigmented or erythematous plaques with occasional scaling [9].

- Other rare causes of hypopigmentation in our study includes PMLE, Tinea versicolor and scleroderma

5. CONCLUSION

Hypopigmented \depigmented lesions have a great impact on patients esthetic appearance leading to psychosocial impairment. There is not much data published on hypomelanoses in geriatric population. A further research with larger sample size and longer study duration can help us understand hypomelanosis in geriatric population better.

CONSENT

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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