Original Research Article

Prevalence of Geriatric Dermatosis – A Study

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Abstract

Background: Geriatric age is generally taken as the age beyond 65 years. Geriatric skin has a high risk of toxicity due to increased surface area to volume, decreased subcutaneous fat, and high ambient temperature and humidity. Both physiological and pathological changes can occur in this age group.

Aim: The aim of the study was to assess the frequency of geriatric physiological and pathological cutaneous conditions and their management.

Materials and methods: The patients above 65 years attending the dermatology OPD at Osmania General Hospital, Hyderabad from September 2009 were taken into study to a total of 100 cases

Results: Physiological lesions (100) were more common than pathological lesions (37). In our study, senile xerosis (83/100) was the most common condition among physiological conditions and fungal infections (23/100) were more common among pathological conditions.

Conclusion: Among geriatric skin conditions, physiological ski conditions were more common manifestations when compared to pathological conditions. Among physiological conditions senile xerosis, senile pruritus and acrochordons were the common manifestations requiring treatment whereas the rest of the conditions like seborrheic dermatitis, cherry angiomas, cutaneous horns, cutis laxa, dermatoheliosis occur rarely.

Key words

Geriatric, Dermatosis, Prevalence.

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Introduction

Dermatology problems in old age have always been a significant part of dermatology [1]. Development of the field will continue at great speed. Advances in research, bio engineering, developmental biology and rapid dissemination of information using computers and the internet will all contribute to improved understanding of geriatric dermatologic conditions [2].

Geriatric age is generally taken as the age beyond 65 years [1]. Aging is a process of progressive in the maximal functioning and reserve capacity of all organs including skin [3]. Geriatric skin has a high risk of toxicity because of increased ratio of surface area to volume, decreased subcutaneous fat, high ambient temperature and humidity [4].

Aim and objectives

The aim of the study was to assess the frequency of cutaneous lesions, geriatric physiological and pathological cutaneous lesions and to draw necessary conclusions to prevent the occurrence of geriatric dermatological disorders.

Materials and methods

Subjects: Geriatric people aged above 65 years. **Study centre:** Osmania General Hospital, Hyderabad.

Study duration: From September 2009 to a total number of 100 cases.

Inclusion criteria

- Age above 65 years
- Subjects outpatients and inpatients.

Special case proforma was prepared which was used to record complaints, history, clinical features and results of investigations. Consent was taken from patients after being informed about the aim of the study. The data recorded were age, sex, occupation, complaints, physical examination and appropriate investigations.

Investigations

Gram's staining

Skin biopsy Tzanck smear test

Results

In old age physiological lesions are more common than pathological lesions. In our study, physiological conditions like greying of the hair and wrinkles were more common conditions which do not cause much discomfort. Senile xerosis and Senile pruritus were the most common bothersome geriatric physiological conditions in our study. Acrochordons and Senile comedones were also common conditions in old age. The Acrochordons were the most common conditions in our study requiring surgical removal by electro cautery. Acanthosis nigricans and Macular amyloidosis, IGH, Seborrheic keratosis and Senile purpura were common in occurrence whereas seborrheic dermatitis, cherry angiomas, cutaneous horns and dermatoheliosis were less common. Senile comedones and cherry angiomas were also seen very frequently in old age group, whereas senile petechiae and purpura were rare in occurrence. All the senile lesions were more common in males when compared to females in the ratio of 3:2. The pathological lesions were seen in 37 patients, whereas the physiological lesions were seen in all patients. The discrepancy in the total number of patients was due to the occurrence of both physiological and pathological lesions in some of the patients. Tinea corporis was the most common lesion in pathological conditions. Stasis dermatitis also occurs very frequently in old age patients. zoster was commonly seen immunocompromised conditions like diabetes mellitus, whereas pellagra was seen in alcoholics and not taking proper diet.

In the current study of 100 patients of geriatric age group the following were the observations. The cases with physiological lesions were all 100 cases, with pathological skin lesions were 37 cases.

In our study, the most common cutaneous lesion was senile xerosis with (83 patients out of 100)

83%, which was most commonly found over extremities like forearms, hands, legs, dorsum of the feet followed by trunk. Senile purpura and ecchymosis are found in 6%. Ecchymosis commonly involving extensor aspects forearms was noted. Senile comedones were found in 14% of patients frequently involving the face. Seborrheic Keratosis was found in 6% of patients involving mainly face, over the trunk, back, thighs and upper arms. Idiopathic Guttate Hypo melanosis was found in 8% of patients involving mainly both upper and lower limbs. Cherry angiomas were seen in about 3% of patients, involving the back, trunk, abdomen, upper and lower limbs. Greying of the hair was seen in every patient of both males and females. Brittle nails were seen in females most commonly who were doing household work, involving prolonged contact with water, soap and detergents. Baldhead was seen in about 40 patients out of 51 males in the study.

Herpes zoster was present in 10% of patients who had an immunocompromised condition like diabetes mellitus, involving the thoracic dermatome T9-10 and T4-5 areas. Air born contact dermatitis was found in about 5% of patients involving the entire body area who were farmers by their occupation, continuously exposed to sun and air.

Fungal infections like Tinea corporis was found in 23% of patients who were suffering with diabetes mellitus mainly involving the groin areas, inframammary areas, over the buttocks, over the thighs and in the axillary areas. Stasis dermatitis was found in about 8% of patients involving the lower limbs, around the ankle areas hyperpigmentation with oedema of feet. Pellagra was found in about 8% of patients who were alcoholics, and not taking proper diet, over the forearms, dorsum of the hands and legs. Psoriasis was found in about 5% of patients which was a common plaque variety involving mostly trunk, upper and lower limbs. Lichen planus was found in about 3% of patients, which was a generalised variety, who are taking drugs for hypertension. Vesiculobullous disorders which included both pemphigus vulgaris and bullous pemphigoid represent about 5% of patients (**Table – 1, 2**).

Discussion

This cross sectional study was done to assess the skin lesions in the geriatric age group. The results with discussion have been presented below.

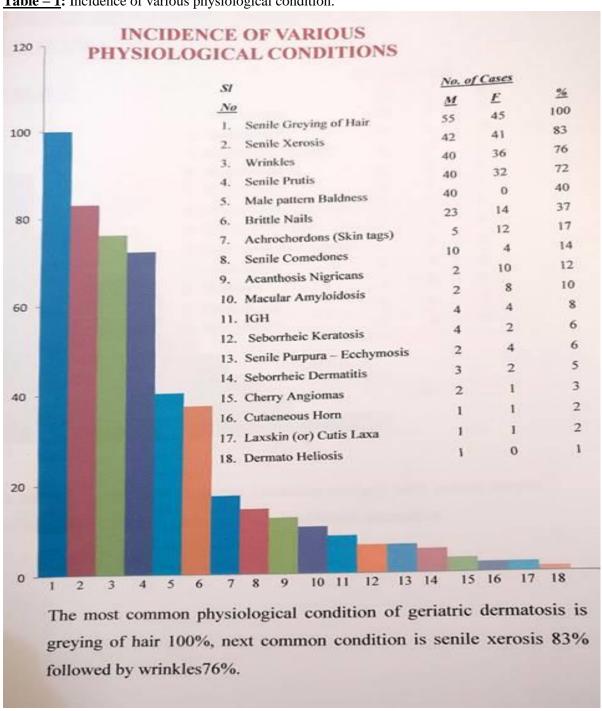
Senile xerosis is the most common skin condition in the people aged above 60 years. In our study senile xerosis was about 83% as compared to in comparative study 85.5% of CRV Narasimhulu, et al. [5] done in 200 patients, and in another study done at Bangalore where it is about 78% [7]. Wrinkling is seen in 76% of patients in our study, where as in CRV Narasimhulu, et al. [5] study it is about 95%, these glyphic wrinkles are seen in the sun exposed areas, viz face, neck, forearms, dorsum of hands, feet. Generalised pruritus is found in about 72% of patients in our study as compared to about 78% in CRV Narasimhulu, et al. [5] study. Senile Petechiae and Purpura are seen in about 6% of patients in our study as compared to CRV Narasimhulu, et al. [5] study done in 200 patients where it is about 3%. Senile comedones are seen in 15% of patients in our study as compared to 6.5% of patients in CRV Narasimhulu, et al. [5] study done in 200 patients. Senile lentigines are seen in about 7% of patients in our study as compared to 10% in CRV Narasimhulu, et al. [5] study. Seborrheic keratosis is seen in about 5.3% of patients in our study as compared to 4% of patients in CRV Narasimhulu, et al. [5] study. In our study greying of hair is seen in every patient, where as in CRV Narasimhulu, et al. [5] study also it is 98% showing equal incidence in both the studies. Androgenic alopecia is seen in about 74% of cases in our study as compared to 71% of cases in CRV Narasimhulu, et al. [5] study. Vertical ridging of nails is seen in about 78% of cases in our study as compared to 72.5% of cases in CRV Narasimhulu, et al. [5] study, because in our study most of the patients were manual workers, who worked in fields and agricultural lands.

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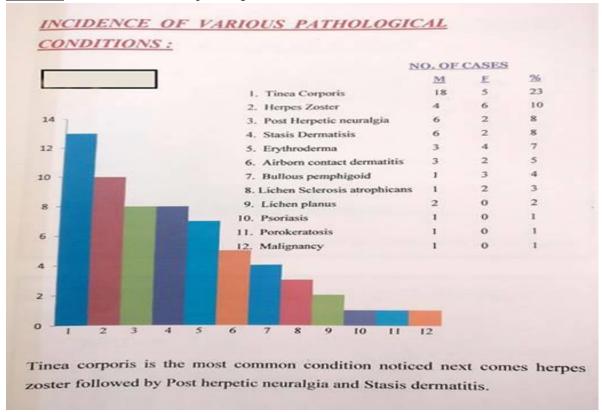
Onychomycosis is found in about 13% of cases in our study as compared to 12% of cases in **CRV** Narasimhulu, et al. [5] Papulosquamous disorders were seen in about 8% of cases in our study as compared to 12.5% of cases in CRV Narasimhulu, et al. [5] study. Vesiculobullous disorders were seen in about 5% of cases in our study as it was not mentioned in CRV Narasimhulu, et al. [5] study. Herpes zoster

is found in about 8% of cases in our study, and it is seen in patients suffering with diabetes and mellitus with high random blood sugar levels. Tinea corporis was seen in about 23% of cases in our study as compared to 35% of cases in CRV Narasimhulu et al study. In our study two case of pellagra seen who are daily labourers, talking alcohol, dependent on Jowar food.

<u>Table -1</u>: Incidence of various physiological condition.



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<u>Table -2</u>: Incidence of various pathological conditions.

Conclusion

In conclusion our results indicated that among geriatric skin conditions, physiological ski conditions were more common manifestations when compared to pathological conditions. Among physiological conditions senile xerosis, senile pruritus and acrochordons were the common manifestations requiring treatment whereas the rest of the conditions like seborrheic dermatitis, cherry angiomas, cutaneous horns, cutis laxa, dermatoheliosis occur rarely. Senile comedones, IGH, seborrheic keratosis, wrinkles occur commonly in geriatric age group because of the constant prolonged exposed to the sunlight which requires simple measures like protection from sunlight, by applying topical sun screens and emollients.

Among pathological conditions in geriatric age group, tinea corporis was the leading cause in our study. Herpes zoster and post herpetic neuralgia also occurred commonly especially in immunocompromised conditions. Airborne contact dermatitis was more common among

farmers who were continuously exposing to sun and air [6].

Statis dermatitis occurred mainly in people who were in standing posture for prolonged time by occupation. In our study malignancy was seen in only one condition that is porokeratosis with squamous cell carcinoma.

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