

A study of Vitiligo and other Pigmentary disorder among geriatric patient attending a tertiary care hospital

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Abstract

Introduction: An increasing proportion of old population makes it very important to recognise and appropriately address skin diseases in elderly. As advances in medical care have prolonged life span and expanded the elderly demographics, there is a need to evaluate various cutaneous disorders in the growing geriatric population. **Aims and Objectives:** To Study Vitiligo and Other Pigmentary Disorder among Geriatric Patient Attending a Tertiary Care Hospital. **Materials and Methods:** The study was conducted in the Department of Dermatology, Academy of Medical Sciences, Pariyaram, and Kannur. 500 patients of age 65 years and above attending the outpatient department of Dermatology and Venereology at Academy of Medical Sciences, Pariyaram, Kannur over a continuous fixed period of 6 months. All patients attending the outpatient department of Dermatology and Venerology with the below criteria were included in the study. The data obtained was subjected to descriptive analysis using SPSS software. **Result:** Among 500 patients, young old males constituted 65.2% and young old females were 34.8%. Frail elderly males were 63.2% and frail elderly females were 36.8%. Extreme aged males were 57.1% and extreme aged females were 42.9%. Other pigmentary disorders like idiopathic guttate hypomelanosis, post inflammatory hypo or hyperpigmentation, melasma were more common in this study (7.2%). Vitiligo was present in 2% of cases. Pigmentary disorders were more common in young old (6.8%) age group and vitiligo was equally distributed between young old and frail elderly. **Conclusion:** In our study we have found that Pigmentary disorders accounted for 7.2% of cases. Vitiligo was seen in 2% of the patients in our study.

Key Words: Pigmentary Disorder, Vitiligo, Geriatrics.

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INTRODUCTION

An increasing proportion of old population makes it very important to recognise and appropriately address skin diseases in elderly.¹ As advances in medical care have prolonged life span and expanded the elderly demographics, there is a need to evaluate various cutaneous disorders in the growing geriatric population.² The improvement has thus changed the demography of most nations which is more marked in well developed countries accounting for 12% of the population aged

65 years and above.³ In India, 5.3% of general population is above 65 years. There has been a gradual increase in life expectancy in the last few decades.⁴ The average life expectancy in India is 67.46 for males and 72.61 for females. Additionally, with the population of those of age 80 and above also rapidly increasing, an increased emphasis on geriatric medicine is inevitable. Skin changes are among the most visible signs of aging.⁵ With aging, the epidermis thins and cell turnover is decreased by 50%. Dermo epidermal junction flattens with age and lack of dermo epidermal cohesion may lead to tendency for bulla formation at the extremes of age. The main structural changes are observed in the dermis of aged skin. Dermal thickness decreases by about 20% and atrophy is present. The solubility and turnover rate of collagen decrease contributing to impaired wound healing. Degenerative changes in the elastic tissue occur. Sebum production decreases and overall volume of sub cutaneous fat tissue diminishes. Common skin conditions in old age include generalised pruritus, senile lentigines, senile comedones, achrochordons, cherry angioma, papulo squamous disorders, pigmentary disorders, eczemas,

stasis dermatitis,⁶ vesiculobullous disorders such as bullous pemphigoid, leg ulcers due to venous hypertension and arterial diseases, decubitus ulcers, herpes zoster, ectoparasitic infestations such as scabies and pediculosis corporis, allergic contact dermatitis due to local medicaments,⁷ plastics in hearing aids and spectacle frames, plants⁸ and hair dyes, fungal infections, benign and malignant tumors of skin. Photoaging changes include wrinkling, xerosis, solar lentigines, seborrheic keratosis, freckles, telangiectasia, purpura and tendency to develop pre malignant and malignant neoplasms. Skin changes in elderly can occur in a setting of associated renal disease, thyroid disease, cholestasis, anemia, internal malignancy etc. Many elderly persons spend their time in nursing homes and assisted living facilities. Care givers and medical personnel can help decrease or prevent the development of many skin disorders in elderly by addressing several factors such as patient's nutritional state, medical history, current medications, physical limitations, mental state and personal hygiene. These factors helps us to detect, counsel, treat and protect them at an early age and they can grow old gracefully and live with the process of senescence with dignity.⁹ All skin lesions in elderly should be carefully inspected to detect any sign of potential pre malignant or malignant nature which are by far the most serious hazard to the elderly.

RESULT

In this study, 500 geriatric patients of age 65 and above were included. Of them, males constituted 64.2% and females 35.8% of the total patients. Table 1 below shows the Agesex- wise distribution in the three age groups.

Table 1: Age - Sexwise distribution of Patients of Geriatric age groups

| Sex | Young old (65-74 yrs.) | | Frail elderly (75-84 yrs.) | | Extreme aged (85 yrs. and above) | |
|--------|---------------------------|---------|-------------------------------|---------|-------------------------------------|---------|
| | No. | Percent | No. | Percent | No. | Percent |
| Male | 221 | 65.2 | 84 | 63.2 | 16 | 57.1 |
| Female | 118 | 34.8 | 49 | 36.8 | 12 | 42.9 |

Among 500 patients, young old males constituted 65.2% and young old females were 34.8%. Frail elderly males were 63.2% and frail elderly females were 36.8%. Extreme aged males were 57.1% and extreme aged females were 42.9%.

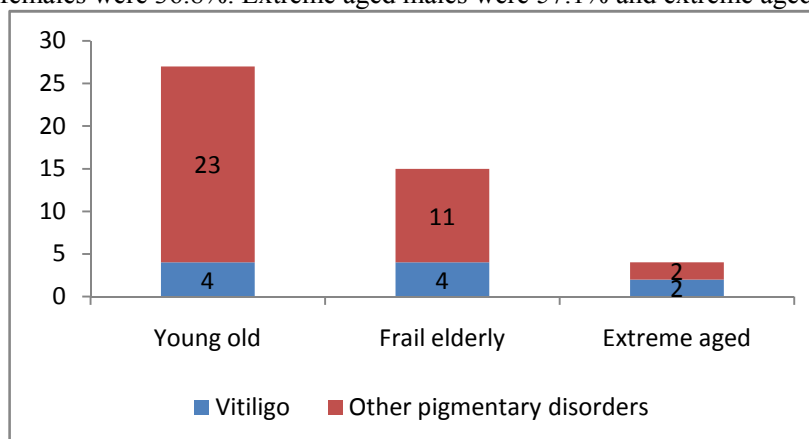


Figure 1: Distribution of vitiligo and other pigmented disorders

Geriatric health care has become a worldwide concern but relatively few statistical studies are available about geriatric skin diseases.¹⁰

MATERIALS AND METHODS

The study was conducted in the Department of Dermatology, Academy of Medical Sciences, Pariyaram, Kannur. 500 patients of age 65 years and above attending the outpatient department of Dermatology and Venereology at Academy of Medical Sciences, Pariyaram, Kannur over a continuous fixed period of 6 months. All patients attending the outpatient department of Dermatology and Venereology with the below criteria were included in the study. Age 65 years and above, Clinical evidence of cutaneous disorders, Willingness of the patient to participate in the study. Hospital based descriptive study. All the patients were subjected to detailed history taking and meticulous examination in relation to age, sex and associated systemic diseases as per the proforma attached. The clinical manifestations in relation to geriatric dermatoses was recorded. Detailed systemic evaluation was carried out in each case. Relevant investigations was performed, wherever indicated, after obtaining informed consent. Statistical tests used included Chi square test. The data obtained was subjected to descriptive analysis using SPSS software.

According to Fig.1, other pigmentary disorders like idiopathic guttate hypomelanosis, post inflammatory hypo or hyperpigmentation, melasma were more common in this study (7.2%). Vitiligo was present in 2% of cases. Pigmentary disorders were more common in young old (6.8%) age group and vitiligo was equally distributed between young old and frail elderly.

DISCUSSION

Geriatrics which means care of the aged people, is derived from greek word geros-old man and iatros-healer. Definition in terms of chronological age usually include individuals of age 65 years and older, a group that is characterized by considerable variation in physiologic, mental and functional capacity. Sub groups of elderly include young old (65-74 yrs), old old, frail elderly or aged (75yrs and older) and the oldest old or extreme aged (85 yrs and older).¹¹ Discoveries in medical sciences and improved social conditions during past few decades have increased human life span thereby leading to an increasing segment of geriatric population.¹² This group is noted to have characteristic group of dermatoses called as geriatric dermatoses. These may be expressed as cutaneous changes intrinsic to chronological aging. Alternatively there may be unrelated dermatoses having altered expression on geriatric skin.¹³ Although rarely fatal, cutaneous disorders carry with them significant morbidity and potential to greatly decrease the patient's quality of life.¹⁴ It is estimated that 7% of all physician visits by elderly involve skin disorders and that treatable cutaneous disorders occur in more than 50% of otherwise healthy older adults.¹⁵ India is in a phase of demographic transition with a sharp rise in the number of elderly population between 1991-2001. It has acquired the label of 'aging nation' with 7.7% of population being more than 60 years old. It is attributed to decrease in fertility and mortality rate due to availability of better health care.¹² As the elderly population increase, society must be prepared to meet long term care needs of growing number of disabled elderly. This will require integration of traditional acute and long term care services. Optimum care of geriatric patients particularly those with chronic conditions and disabilities require the involvement of all health care providers. In our study, we have found that Pigmentary disorders accounted for 7.2% of cases in our study. Pavithra S *et al*¹⁶ noted 5.8% of such cases and a higher incidence was noted by Grover S *et al*.² Idiopathic guttate hypomelanosis was the most common entity noted in our study which is consistent with studies by Patange SV *et al*,⁴ Beauregard *et al*,¹⁷ and Sahoo A *et al*.³ Vitiligo was seen in 2% of the patients in our study. Similar rates were observed by Weisman *et al* (1.4%)¹⁸ and Bilgili *et*

*al*¹⁹ (1%). However a higher incidence was noted by Sahoo A *et al*³ (3.5%) and Patange SV *et al*⁴ (19%).

CONCLUSION

In our study we have found that Pigmentary disorders accounted for 7.2% of cases. Vitiligo was seen in 2% of the patients in our study.

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