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ORIGINAL ARTICLE

To evaluate the skin infection among elderly population

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ABSTRACT:

Aim: To evaluate the skin infection among elderly population. **Methods:** This research comprised 100 geriatric individuals aged 60 years and older. In this research, individuals with no chronic systemic illness, such as diabetes, hypertension, coronary artery disease, or cardiac sickness, as well as no regular medication-desi, ayurveda, or allopathic-were included. Patients were asked to provide a full history of any persistent systemic disease. The history and clinical examination were used to make a diagnosis of skin disorders. Demographic information such as age, gender, and residence were collected. Fasting blood sugar, complete haemogram, fasting lipid profile, EKG, fasting thyroid profile, liver function test, and renal function test were among the tests performed. **Results:** The majority of patients (62%) were between the ages of 60 and 70, with 26 percent between the ages of 70 and 80, 10 percent between the ages of 80 and 90, and 2 percent between the ages of 90 and 100. Eczematous conditions were the most prevalent presenting problem in 26% of patients, followed by infections and infestation in 25%, papulosquamous disorders in 11%, xerosis in 7%, and generalised pruritus of unknown aetiology in 4%. Seborrheic dermatitis was the most common eczematous condition (23.08 percent), followed by allergic contact dermatitis (19.23 percent) and hand eczema (15.38 percent). Other eczematous conditions included asteatotic dermatitis (11.54 percent), photodermatitis (11.54 percent), and air borne contact dermatitis (7.69 percent). Dermatophytic infections (15%) were the most common infectious disorders observed, followed by Scabies (10%). (5 percent). Tineacorporis was the most prevalent kind of dermatophytic infection. Viral infections, such as herpes zoster, warts, and molluscumcontagiosum, accounted for 3% of the illnesses. Papulosquamous diseases such as psoriasis and lichen planus were seen in 11 patients (11%), xerosis in 7 patients (7%), pruritus of unknown cause in 4%, pigmentary disorders such as vitiligo and idiopathic guttatemelanosis in 2%, drug rash in 3%, immunobullous disorders in 1%, and hair loss in 3% patients. **Conclusion:** The prevalence and pattern of illnesses in our research were consistent with earlier studies in the senior population. Because this research was done in a short period of time and with fewer people, further studies of this kind are required in our community to develop a good data base for skin issues in the elderly.

Keywords: skin infection, elderly population

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INTRODUCTION

Aging is a steady reduction in the maximum functioning and capability of all organs of the body, including the skin. [1] Cell replacement, DNA repair, barrier function, immunological response, epidermal hydration, reduction in epidermal fillagrin, and epidermal turnover rate are some of the skin functions that decline with age. [1] The causes are diverse and poorly understood. Because of degenerative changes in the skin, as well as other systemic illnesses and a decline in immunity, the elderly are more vulnerable to a variety of dermatological disorders and infections. [2] The elderly are more prone to malnutrition and obesity, both of which increase infection access into the epidermis. [3] The wide range of geriatric dermatological illnesses causes considerable morbidity and reduces the aged population's quality of life. The purpose of this research was to establish the typical pattern and incidence of dermatological illnesses in individuals aged 60 and above who did not have any chronic systemic illness.

METHODS AND MATERIALS

This observational research was conducted at the dermatology department. This research comprised 100 geriatric individuals aged 60 years and older. In this research, individuals with no chronic systemic illness, such as diabetes, hypertension, coronary artery disease, or cardiac sickness, as well as no regular medication-desi, ayurveda, or allopathic-were included. Patients were asked to provide a full history of any persistent systemic disease. The history and clinical examination were used to make a diagnosis of skin disorders. The goal of the research was described to the patients, and their informed permission was obtained. Demographic information such as age, gender, and residence were collected. Fasting blood sugar, complete haemogram, fasting lipid profile, EKG, fasting thyroid profile, liver function test, and renal function test were among the tests performed. At the time of presentation, blood pressure and weight were taken. SPSS was used for all computations (Statistical Package for Social Sciences). The descriptive statistics were computed.

RESULTS

During the research period, the 100 patients represented 5% of overall attendance in the OPD and 25% of geriatric patients in the OPD. The average age of the presenters was 67.8 years. The patient's lowest and highest ages were 60 and 93, respectively. There were 55 men and 45 women, for a male:female ratio of 1.22:1. (Table 1) The majority of patients (62%) were between the ages of 60 and 70, with 26 percent between the ages of 70 and 80, 10 percent between the ages of 80 and 90, and 2 percent between the ages of 90 and 100. (Table 2). Eczematous conditions were the most prevalent presenting problem in 26% of patients, followed by infections and infestation in 25%, papulosquamous disorders in 11%, xerosis in 7%, and generalised pruritus of unknown aetiology in 4%. (Table 3).Seborrheic dermatitis was the most common eczematous condition (23.08 percent), followed by allergic contact dermatitis (19.23 percent) and hand eczema (15.38 percent). Other eczematous conditions included asteatotic dermatitis (11.54 percent), photodermatitis (11.54 percent), and air borne contact dermatitis (7.69 percent) (Table 4). Dermatophytic infections (15%) were the most common infectious disorders observed, followed by Scabies (10%). (5 percent). Tineacorporis was the most prevalent kind of dermatophytic infection. Viral infections, such as herpes zoster, warts, and molluscumcontagiosum, accounted for 3% of the illnesses. The most prevalent viral infection was herpes zoster. Bacterial infections were found in one instance, and one patient had body lice. Papulosquamous diseases such as psoriasis and lichen planus were seen in 11 patients (11%), xerosis in 7 patients (7%), pruritus of unknown cause in 4%, pigmentary disorders such as vitiligo and idiopathic guttatemelanosis in 2%, drug rash in 3%, immunobullous disorders in 1%, and hair loss in 3% patients. The most prevalent miscellaneous disorders that contributed 15% of cases were seborrheic keratosis, skin tags, ecchymosis, senile comedones, xanthelasma, and callosity (Table 5).

Table 1: Gender distribution

Gender	Number	%
Male	55	55
Female	45	45

Table 2: Age distribution of the patients

Age	Number	%
60-69	62	62
70-79	26	26
80-89	10	10
>90	2	2

Table 3: Distribution of skin dermatoses

	Diseases	Number	%
Eczema		26	
	Fungal	15	
Infection and infestation	Scabies	5	
	Viral	3	25
	Bacterial	1	
	Body lice	1	
Papulosquamous	Psoriasis	7	11
diseases	Lichen planus	4	
Xerosis		7	
Generalized pruritus		4	
Pigmentary	Vitiligo	3	
diseases	Idiopoathicguttate hypomelanosis	2	5
Hair loss		3	
Drug rash		3	
Vesiculobullous diseases		1	
Miscellaneous disorders		15	

Table 4: Prevelance of different types of eczema in elderly

Type of eczema	Total number of patients=26	Percentage (out of total cases of eczema) (%)
Seborrheic eczema	6	23.08
Allergic contact dermatitis	5	19.23
Hand eczema	4	15.38
Asteatotic eczema	3	11.54

Photodermatitis	3	11.54
Air borne contact dermatitis	2	7.69
Lichen simplex chronicus	1	3.85
Irritant contact dermatitis	1	3.85
Atopic dermatitis	1	3.85

Table 5: List of miscellaneous dermatological disorders

Miscellaneous dermatological disorders	Total number of patients (n=15)	Percentage out of total cases of miscellaneous dermatological disorders (%)
Seborrheic keratosis	2	13.33
Skin tags	2	13.33
Ecchymosis	1	6.67
Xanthelasma	1	6.67
Callosity	1	6.67
Post herpetic neuralgia	1	6.67
Solar lentigenes	1	6.67
Senile comedones	1	6.67
Wrinkles	1	6.67
Keloid	1	6.67
Pyogenic granuloma	1	6.67
Scrotal calcinosis	1	6.67
Apthous ulcer	1	6.67

DISCUSSION

India is presently second only to China in terms of absolute numbers of persons aged 60 and above. [4] This demographic transition has necessitated a greater focus on geriatric medicine. Eczema was determined to be the most frequent illness (26 percent) in both boys and females in our research. This discovery is comparable to that made by Thapa et al, who discovered that eczema (35.8 percent) was the most common. [5]Bilgili et al and Liao et al also found a greater prevalence of eczema, at 32.7 and 58.7 percent, respectively. [6,7] Contact dermatitis and seborrheic dermatitis are more frequent in the aged population. Seborrheic dermatitis (23.08 percent) was the most frequent kind of eczema in our research. According to Thapa et al, seborrheic dermatitis is the most frequent eczematous dermatitis in 40.67% of eczema patients. [5] Contact dermatitis is a serious medical condition among the elderly, who are more sensitive to irritants and allergens owing to epidermal barrier malfunction. [8] The second most frequent eczema in our research was allergic contact dermatitis. In earlier research, the prevalence of allergic contact dermatitis ranged from 4.2 percent to 72 percent. [5,7] There are various variables that contribute to an increase in the incidence of eczemas in the elderly, including poor immunological function, skin thinning, dryness, and decreased blood flow. 6 Because of increased exposure to soap and detergents, hand eczema was seen in four patients, with a considerable female predominance of 70%. In our investigation, infections were the second most common category of illnesses, following the trend shown by Thapa et al, Bilgili et al, and Liao et al. [5,7] In our research, dermatophytic infections had a high incidence, correlating with the present serious scenario of a rise in the incidence and prevalence of superficial dermatophytosis in India. Tineacorporis was the most frequent dermatophytic infection, followed by tineacruris, tineapedis, and tineaunguium in decreasing order of incidence. According to Bilgili et al and Yalcin et al, tineapedis is the most frequent dermatophytic infection. [9] Herpes zoster was the most prevalent viral infection, as reported in previous investigations. In our research, the number of patients with scabies was high, and many had numerous relapses due to their poor socioeconomic position and overcrowded living conditions. In our research, factors such as decreased personal care and neglect may potentially lead to recurring bouts of scabies in the elderly. In our research, the number of patients with bacterial infections such as folliculitis, carbuncle, and cellulitus was extremely low since diabetics and patients with other susceptible factors were removed. This is quite low in contrast to the 7% reported by Biligili et al and 7.3 percent observed by Yalcin et al since their research group included individuals with a variety of co morbidities. [6,9] In our investigation, individuals with widespread pruritus were those in whom an underlying dermatological condition or systemic illness had been ruled out as the source of the pruritus. In our research, 4% of patients fell into this group. Participants with xerosis comprised 7% of the patients in our research. Skin dryness worsens with ageing because to reduced secretary activity of adipose tissues and sweat glands. [6]Winterxerosis develops owing to more frequent and heated bathing and less usage of moisturising lotions. Reduce the frequency of baths, use less soap, and apply moisturising cream after baths to avoid skin dryness, but take care as bath oils may make the water extremely slippery, which can be dangerous in

the old and weak patient. [10]Darjani et al and Thapa et al found 11.6 percent and 5.9 percent instances of xerosis in older persons, respectively. [11] The prevalence of premalignant and malignant skin tumours was lower in our research than in prior investigations. [5,11] The low incidence of older individuals with seborrheic keratosis, solar lentigenes, and wrinkles might be attributed to the acceptance of these dermatological disorders as a natural part of ageing. Many of the skin disorders observed most often on random examinations of older persons are not ones for which elderly patients generally seek dermatological consultation. 10 More research is required to determine the burden of illness in this age group in order to enhance health standards in the elderly population.

CONCLUSION

The prevalence and pattern of illnesses in our research were consistent with earlier studies in the senior population. Because this research was done in a short period of time and with fewer people, further studies of this kind are required in our community to develop a good data base for skin issues in the elderly.

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