

Pattern Of DermatosiS In Geriaritic Patients Attending A Secondary Health Care Centre In A Rural Area

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Abstract

Background: Improving healthcare facilities and socioeconomic parameters, have increased the life expectancy, and thus the size of geriaritic population. Geriaritic dermatosis along with other geriaritic diseases, are also more prevalent.

Aims and objectives: To determine the pattern of dermatosis in geriaritic subgroup of our population

Material and methods: This study involving 300 patients over 60 years of age, was conducted in the outpatient department (OPD) of dermatology of a secondary care centre. A detailed history and examination of cutaneous and systemic complaints was done. Diagnosis was done on clinical assessment, and investigations were done whenever required. All the findings were recorded and analysed .

Results: Out of the total of 300 patients, 176 were males as compared to 124 females (1.41:1). Mean age was 66.92 ± 6.31 years, with majority belonging to under 70 years of age (62.66%). Most common dermatosis were infections followed by eczemas. Commonest presenting symptom was pruritus (68.33%). Systemic complaints were present in 166(55.33%) patients, hypertension (26.33%) being the commonest.

Conclusion: Proper management of these geriaritic dermatosis requires enhanced awareness and knowledge about their pattern and prevalence.

Keywords: skin, geriaritic, dermatosis, ageing, comorbidities

Introduction

The geriaritic population, composed of persons above 60 years of age,[1] is progressively increasing, in all parts of the world.[2] Indian population census data 2011 reports 104 million Indians above the age of 60 years, making 8.6% of total population.[3] Further, it is projected to increase to 10% by 2021 and even expected to double by 2026. Progressive increase in life expectancy and decline in birth rates, are main reasons proposed for this increase.[4]

With increasing geriaritic population, their health care is getting increased attention. Their health problems are usually multiple and often masked by neurological and other deficiencies and impairments.[5,6] Skin being the largest and first visible organ to come in contact with environmental insults as well as intrinsic changes, makes it structurally and functionally weak and susceptible to age related disorders.[7]

Geriatric dermatosis are a complex group of disorders. Multiple intrinsic and extrinsic factors interact in their aetiopathogenesis.[8]Clinically their spectrum varies from subtle potentially harmless dermatosis such as xerosis to skin diseases with significant morbidity and thus impairment of quality of life.[9] They can also be fatal if the cutaneous lesion is malignant itself or is a sign of a fatal internal disease.[10,11] They also pose a diagnostic difficulty due to atypical presentations, difficult history taking, delay in seeking medical help, interference due to multiple comorbidities and medications etc.[10]

This study was conducted to detect pattern of geriatric dermatosis in a sample of our population. Being aware about this is important, both for planning of preventive measures and prompt management of geriatric dermatosis.

Material and methods

This was a hospital-based cross-sectional study conducted over a period of one year in the Dermatology out-patient department (OPD) of a secondary health care centre. Three hundred consecutive patients aged above 60 years were enrolled in the study after informed consent. A detailed history of cutaneous and systemic complaints was noted. A general physical and cutaneous examination was done. Diagnosis was done on clinical assessment and investigations such as CBC, LFT, KFT, urine examination, blood sugar, lipid profile, skin smears, scrapings, nail clippings and skin biopsy was done whenever required. Histopathological examination of skin was not possible in our center, and was thus referred to the nearest tertiary care institute. The presence and association with systemic findings was also sought. All the findings were recorded in predesigned forms and tabulated in the form of a master chart in Microsoft Excel Worksheet. Analysis of data was done using SPSS software.

Results

Total of 300 patients were included in the study out of which 176 were males as compared to 124 females (1.41:1). Mean age was 66.92 ± 6.31 years with majority belonging to under 70years of age (62.66%). Most common dermatosis were infections (32%) followed by eczemas (24.66%). 24 (8%) patients had more than one presenting complaint. Commonest presenting symptom was pruritus, in 205 patients (68.33%), which was idiopathic in 37 among them. Among infections herpes zoster formed the largest group and allergic contact dermatitis was the most common eczema. Papulosquamous disorders were seen in 38(12.66%) patients, with psoriasis present in 32 among them. Skin tumors, although present in 26 patients, were mostly benign. One patient of basal cell carcinoma and one of squamous cell carcinoma was noted. Connective tissue disorders consisted of one case each of discoid lupus erythematosus and systemic sclerosis. Bullous disorders included a case of linear IgA dermatosis and diabetic bullae also. Vitiligo was the commonest pigmentary disorder present in 4 cases followed by melasma(3). Post-herpetic neuralgia was the most common diagnosis in miscellaneous group. Systemic complaints were present in 166(55.33%) patients and 232(77.33%) patients were on some form of medication. Commonest systemic complaint was hypertension (26.33%) followed by diabetes mellitus (12.33%). 61 (20.33%) had more than one comorbidity.

Table 1

S/No	Dermatosis	No	Male	Female	<70 years	>70years
	Infections/infestations	96	55	41	57	39
	Eczema	74	41	33	49	25
	Idiopathic pruritus	37	21	16	11	26
	Papulosquamous disorders	28	18	10	19	9
	Skin tumors	26	16	10	14	12

	Drug rash	11	6	5	8	3
	Pigmentary disorders	8	3	5	7	1
	Bullous disorders	8	6	2	5	3
	Urticaria	7	4	3	5	2
	Connective tissue disorders	2		2	2	
	Miscellaneous	29	20	9	18	11

Table 2 Infections and infestations

S/NO		Dermatosis	Number
1	Viral	Herpes zoster	21
		Herpes simplex	3
		Verruca	9
		Molluscum contagiosum	2
2	Bacterial	Folliculitis	9
		Sycosis barbae	1
		Ecthyma	1
3	Fungal	Tinea corporis	6
		Tinea pedis	4
		Tinea cruris	4
		Tinea barbae	1
		Tinea manuum	2
		Onychomycosis	3
		Candidal intertrigo	4
		Interdigital candidiasis	3
		Pityriasisversicolor	2
4	Infestation	Scabies	20
		Pediculosis	1

Table 3 Eczemas

S/no	Type	Number
	Allergic contact dermatitis	20
	Photodermatitis	15
	Lichen simplex chronicus	10
	Asteatotic dermatitis	8
	Seborrheic eczema	8
	Atopic dermatitis	3
	Irritant contact dermatitis	2
	Others	8

Table-4 Comorbidities

Hypertension	79
Diabetes	37
Hypothyroidism	24
Anemia	13
Polycythemia	8
Chronic kidney disease	5
Chronic liver disease	4
Benign prostatic hyperplasia	14
Osteoarthritis	61
Glaucoma	6
Rheumatoid arthritis	2

Figure -1: Herpes zoster.



Figure-2: Candidal intertrigo and skin tags in a diabetic female.



Figure-3: Lichen simplex chronicus on anterior leg.



Figure-4: Seborrheic keratosis



Discussion

Improving healthcare facilities and socioeconomic parameters, have increased the life expectancy, and thus the size of geriatric population. Although geriatric medicine is currently getting its significance, dermatological aspect of the same is also important. Besides health care workers, geriatric dermatosis are at times neglected by the caregiver and even patients themselves, and present at a later stage to hospitals. Proper management of these disorders requires enhanced awareness and knowledge about their pattern and prevalence.

The present study emphasizes the increasing importance of geriatric dermatology. The study involved 300 patients of age of more than 60 years which constitute the geriatric population as per the WHO definition.[1] The patients in our study constituted about 6.25% of cases attending dermatology OPD in the same period. This was higher than some previous studies,[12,13] probably due to better accessibility of our hospital to the study age group, being a secondary health care centre in a rural area. Majority of the patients in our study, were males and belonged to the age group of below 70 years, emphasizing the lack of accessibility of healthcare to females and patients above 70 years. Similar observations were also made in most of the previous studies involving the same population subgroup. [14-18] However with further increase in life expectancy, above 70 years age group will increase and pose newer challenges of availability and accessibility of health care.

Various studies have shown predominance of various disorders, mostly eczematous disorders, pruritus, xerosis and fungal infections, depending upon environmental conditions. Most common disorder in our study were infections and infestations (32 %). Similar observations were made in previous studies.[14-17,19-21] Predominance of infections in this population subgroup points towards weaker immunological status as well as inability to maintain personal hygiene.

However in contrast to these studies where mostly superficial fungal infections were the commonest, herpes zoster was the most common infection in our study. Herpes zoster has been observed in higher numbers in above 60 years age group, secondary to impaired immune function.[22] Disabling pain associated with it may also be the cause of early consultation. A high percentage of post herpetic neuralgia was also seen, as it is more prevalent in this age group.[23]

Scabies was the other common disorder seen. However in many cases due to atypical presentation it was wrongly treated as asteatotic dermatitis and sometimes even as psychological pruritus. Fungal infections were also seen in 9.66% of the patients. Lower prevalence in our study probably reflects drier environmental conditions in our region. These were followed by eczema and papulosquamous disorders. However some studies have observed eczematous disorders to be the most common dermatosis in this subgroup of population. [9,24-28]

The commonest symptom encountered was the generalized pruritus present in 68.33%. It has a variable prevalence in previous studies with a range of about 11.5% to 78.5%. [14,16,17,21,25, 28-31] This large range of prevalence can be attributed to cultural and climatic conditions. It is not a trivial symptom, and has a detrimental effect on quality of life of elderly population. It leads to irritation, insomnia and even depression. Its effect on quality of life has been even shown to be similar to that of chronic pain.[32,33]

Pruritus was multifactorial. Some had an underlying chronic eczema or atopic diathesis. Eczema was seen in 24.66% of patients. Eczemas were prevalent in similar range in other studies involving similar age group. [12,14,15,16,21] Allergic CD followed by photodermatitis were the commonest types, mostly occupational (maximum being involved in apple and paddy farming). The increased prevalence of contact dermatitis in geriatric population, may be due to increased sensitivity to allergens, secondary to dysfunctional barrier function of epidermis in them. Similarly Agarwal et al also observed allergic contact dermatitis as the most common type.[21] However others have observed lichen simplex chronicus as the commonest, [14,16] and some seborheic.[24] Lichen simplex chronicus was a common presentation in our study also.

Xerosis was also a common complaint, seen in 139 patients (46.33%) and was associated with asteatotic eczema in some and generalized pruritus in most cases. Skin is dry and atrophic at this age and use of harsh soaps, hot bathing water and dry weather conditions, further aggravates it. Thus being rough and scaly with breaks in continuity, makes it vulnerable to various dermatosis. Its prevalence in our study was comparable to studies done by Aggarwal, Rathore and Chopra et al. [21,34,35]

However some studies have observed higher, [14,31] and some lower prevalences for xerosis.[15,17,36] Some patients with generalized pruritus but no cutaneous lesion, gave history of systemic diseases and multiple medications. Diseases like diabetes mellitus, thyroid disorders, chronic renal and liver dysfunction, neuropathies, malignancies such as lymphoma and leukaemia, anaemia, polycythemia vera, and multiple medication use have also been associated with pruritus.[17,37,38]

These systemic comorbidities were present in 166 patients (55.33%). Most common systemic association was that of hypertension and its medication (26.33%) followed by diabetes mellitus (12.33%). Other comorbidities seen were hypothyroidism, anemia, arthritis, BPH, Glaucoma etc. Similarly some studies have observed hypertension to be the most common comorbidity, [9,12, 16,26] however some have observed diabetes mellitus to be the commonest.[15,31,39,40]

Still a large percentage of patients had pruritus without any elicitable cause (5.33%). Most of these either had no or temporary response to antiallergics or topical medications. Some were steroid dependent, started as self medication or prescribed by local practitioners. One of the patients with history of acute pruritus was responsive to high dose steroids only. She later developed urticarial, eczematous and bullous lesions, and was proved to be linear IgA dermatosis on biopsy and responded to dapsone.

Papulosquamous disorders were the presenting complaint in 38(12.66%) patients. Most common among them was the psoriasis (7%) . Lichen planus was also seen (2%). The range of presentation of psoriasis as well as lichen planus in this population subgroup has been similar in other studies. [15,21,25,35,41]

Among benign lesions seborrheic keratosis was seen in 19 ,DPN in 5. Limited involvement was seen, most commonly on sunexposed areas, without any association with any underlying malignancy in past and present, however they were not followed up. Skin tags were a association of diabetes and obesity. Cherry angiomas were multiple and mostly on trunk. Malignant and premalignant lesions were also seen, but in small numbers as compared to other studies.[12,16,21]

To conclude, geriatric patients present in dermatology OPD with variable presentations, proper management of which requires enhanced awareness and knowledge about their pattern and prevalence.

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