

Geriatric Dermatoses in Western Rajasthan

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Abstract: Introduction - Geriatric dermatoses is increasing with the increase in number and life expectancy of geriatric population. This study was done to determine the pattern of geriatric dermatoses and factors affecting it. **Material and methods**-One hundred patients aged more than 60 years attending the outpatient department of dermatology were included in this study. Detailed history and dermatological examination were done. Few investigations like KOH mount, gram stain, biopsy were done when ever needed to confirm the diagnosis. **Result**-Out of 100 patients studied 58% were male and 42% were females. Most common associated disease was hypertension seen in 32 patients(37%). Generalized pruritus was the most common symptoms seen in 48 patients. Common dermatoses were degenerative changes like wrinkles seen in 86 patients followed by eczema seen in 24 patients. **Conclusion**-Geriatric dermatoses differ in different region and country as it depends upon the climate, socioeconomic and racial factors.

Keywords: Geriatrics, Dermatoses

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I. Introduction

Aging is a natural process which is progressive, time dependent deterioration due to accumulation of molecular damage. Aging can be defined as a progressive loss of homeostasis that results in decreased organ function¹. The skin is a complex and dynamic organ that shows the most obvious signs of aging. Skin aging can be classified into two broad categories as intrinsic aging and extrinsic aging. Intrinsic or chronologic aging refers to changes on sun-protected skin while extrinsic aging, refer to changes on sun-exposed skin². Two major theories of aging exist. The genetic program theory describes it as an irreversible, orderly process, whereas the stochastic theory implicates "wear and tear" by random environmental assaults³.

The burden of the dermatological disease in older population is significant and often underestimated⁴. Skin disorders in old age are not only due to physical consequences of aging but also due to effect of prolonged environmental exposure especially UV radiation, decrease skin barrier function, wound healing, immune responsiveness and DNA repair.

Common skin manifestations in old age group are xerosis, degenerative changes like wrinkles, infections, infestation, eczema, neoplasms, papulosquamous disorders, hair & nail changes.

The geriatric population (>60 yrs) in India was 6.9% of total population in 2011 and will increase to 12.4% by 2026. This will be due to better health facilities, increased health awareness and increased life expectancy.

In our country, geriatric population problems are not receiving the attention deserved and it is impacting their quality of life. With this background in mind this study was undertaken to determine the clinical pattern of dermatological disorders and factors contributing to them, in elderly patient presenting to our Skin & STD Department.

II. Material and Method

This was a prospective cross-sectioned study conducted in the Skin & STD outpatient department after getting approval from the Institutional Ethical Committee. The study population included total 100 patients above 60 yrs during the study period of October 2018 – March 2019.

A detailed history of all cases was taken. They were examined for any changes in skin and its appendages. The diagnosis was made on basis of clinical features and relevant investigation (KOH, Patch test, Gram stain, biopsy). After taking consent and digital photography, skin findings were divided into following headings:

1. Generalized pruritus
2. Degenerative changes

3. Infections & infestation
4. Eczema
5. Papulosquamous disorder
6. Cutaneous neoplasm
7. Bullous disorders
8. Hair changes
9. Nail changes
10. Miscellaneous conditions

III. Result

Table – 1 Age wise distribution

Age Groups (in years)	Number of Patients	Percentage(%)
60-65	41	41
66-70	30	30
71-75	17	17
76-80	8	8
>80	4	4
Total	100	100

Out of total 100 patients, majority were in the age group of 60-65years (41%) followed by 66-70years (30%).

Table – 2 Gender wise distribution

Gender	Number of Patients	Percentage (%)
Male	58	58
Female	42	42
Total	100	100

In our study 58 patients were male and 42 patients were female. The sex ratio was 1.3

Table – 3 Associated diseases

Disease	Number of Patients	Percentage (%)
Hypertension	32	37
Diabetes mellitus	26	30
Hypothyroidism	8	9
Ischemic heart disease	7	8
Anemia	5	6
Chronic kidney disease	3	4
Bronchial asthma	3	4
Chronic liver disease	2	2
Total	86	100

Hypertension was the commonest associated disease (37%) followed by diabetes mellitus (30%).

Table – 4 Generalized pruritus

Conditions associated with GP	Number of Patients	Percentage (%)
Xerosis	21	44
Diabetes mellitus	12	25
hypothyroidism	6	13
Anemia	5	10
CLD	2	4
CKD	2	4
Total	48	100

Generalized pruritus was seen in 48 cases, out of which xerosis was most common cause (44%).

Table – 5 Degenerative changes

Change	Number of patients	Percentage (%)
Wrinkles	86	53
Xerosis	28	17
Seborrheic keratosis	12	8
Dermatosis papulose nigra	10	6
Senile comedones	9	5
Acrochordon	7	5
Milia	6	4

Senile lentigens	3	2
Total	161	100

The most common degenerative change observed was wrinkles (53%) followed by xerosis (17%).

Table – 6 Pathological skin changes

Skin disease	Number of patients	Percentage (%)
Eczema	24	28
Fungal infection	19	22
Bacterial infection	4	5
Viral infection	3	4
Scabies	2	2
Hansen's disease	2	2
Papulosquamous disorder	12	14
Cutaneous neoplasms	3	4
vesicobullous disorders	4	5
Others	12	14
Total	85	100

The most common pathological skin changes were infections (35%) followed by eczema (28%).

Table 7 – Hair changes

Hair change	Number of patients	Percentage (%)
Diffuse hair loss in female	21	38
Androgenetic alopecia	34	62
Total	55	100

Table 8 – Nail changes

Nail change	Number of patients	Percentage (%)
Loss of luster	19	51
Thickening of nail plate	8	22
Longitudinal ridging	7	19
Onychomycosis	2	5
Beau's line	1	3
Total	37	100

V. Discussion

Geriatric patients constitute a rapidly growing section of Indian population. Increase in dermatologic diseases in this group puts a great burden on health care and need to impose the delivery of health care system.

In present study, out of 100 patient maximum number of patients belonged to age group of 60-65 years (41%), followed by 66-70 (30%) years age group. Males are affected more than females with sex ratio of 1.3. This finding is similar to S. Grover et al⁵.

Most frequent associated systemic disease was hypertension(37%) followed by diabetes mellitus(30%). Most of the diabetic patients had multiple skin conditions like pruritus, skin tag and comedones. In a study by Priya and Thapa diabetes mellitus was seen in 28% of cases and hypertension in 25% of cases which is approximately similar to our study⁶.

Itching is a common symptom in elderly persons. In our study pruritus was seen in 48 cases. Various etiological factors with pruritus were xerosis, diabetes mellitus, anemia, hypothyroidism, chronic liver disease(CLD) and chronic kidney disease(CKD). Xerosis was seen in 44%, DM in 25%, hypothyroidism in 13%, anemia in 10%, CLD and CKD in 4% each. Incidence of generalized pruritus in our study was lower than Patange and Fernandes study, who noticed it in 78.5%⁷.

Skin changes with ageing is due to degenerative changes caused by structural and physiological changes. Wrinkling was the most common finding in our study and it was observed in 86 cases. This finding is similar to other studies by Beauregard and Gilchrist⁸ seen in 95.6% and Priya and Thapa⁶ in 100%.

In our study xerosis or dry skin was seen in 17% of cases which is less as compared to Chopra et al who noted in 50.8% of cases⁹, and Tindall and Smith, who observed it in 77% of cases¹⁰.

Among 100 patients, various eczematous conditions were found in 28% cases. Distribution of conditions was allergic contact dermatitis (36%), asteototic eczema (28%), stasis eczema (16%), seborrheic dermatitis (12%) and infectious eczematous dermatitis (8%). Allergic contact dermatitis which was seen in 36% of cases, was confirmed by patch test. Priya and Thapa observed eczematous conditions in 24.2% which was comparable to our study⁶.

Out of total 100 cases, 30 patients were having infections and infestations. Out of these fungal infections were most common, seen in 19 cases followed by bacterial infections in 4 cases, viral

infection(herpes zoster) in 3 cases and scabies and Hansen's disease in 2 cases each. Similar finding of infections was seen in study by Patange and Fernandes, who observed it in 34.5% of cases⁷.

In our study papulosquamous disorder was seen in 12 cases out of which 8 cases were of psoriasis and 4 cases of lichen planus. Malignant neoplasms were seen in 3 cases out of which 2 cases were of basal cell carcinoma and 1 case was of squamous cell carcinoma.

Among 100 cases vesico-bullous disorders were seen in 4 cases. Out of these 3 were of bullous pemphigoid and 1 was of pemphigus vulgaris. Findings were comparable to the study done by Chopra et al who observed 1.8 % cases of bullous pemphigoid⁹.

Diffuse hair loss in female was seen in 21 cases whereas androgenetic alopecia in male was seen in 34cases. Chopra et al observed androgenetic alopecia in 55% male which is higher than our study. Nail changes were seen in 37 cases. Common nail changes were loss of luster, thickening of nail plate, longitudinal ridging, onychomycosis and beau's line.

VI. Conclusion

Geriatric dermatology is a rapidly growing field. Many common skin problems may present differently in the elderly which may require alterations in standard therapy. Most common skin observed in our study was degenerative changes followed by hair and nail changes, and infections.

References

- [1]. Gilchrist BA. Skin and aging processes. Boca Raton: CRC Press; 1984.
- [2]. Norman RA, Young EM. Atlas of geriatric dermatology. London: Springer; 2014.
- [3]. Yaar M, Gilchrist BA. Cellular and molecular mechanisms of cutaneous aging. *J Dermatol Surg Oncol.* 1990;16:915.
- [4]. Johnson MT, Roberts J. Skin conditions and related need for medical care among persons 1-74 years. United States, 1971-1974. *Vital Health Stat 11.* 1978 Nov;(212):i-v, 1-72.
- [5]. Grover S, Narasimhalu CV. A clinical study of skin changes in geriatric population. *Indian J Dermatol Venereol Leprol* 2009; 75: 305-306.
- [6]. Durai PC, Thappa DM, Kumari R, Malathi M. Aging in elderly: chronological versus photoaging. *Indian J Dermatol.* 2012Sep; 57(5): 343-52..
- [7]. Patange VS, Fernandez RJ. A study of geriatric dermatoses. *Ind J Dermatol Venerol Leprol.* 1995;61:206-8.
- [8]. Beauregard S, Gilchrist BA. A survey of skin problems and skin care regimens in the elderly. *Arch Dermatol* 1987;123:1638-43.
- [9]. Chopra A. Skin diseases in the elderly. *Indian J Dermatol Venereol Leprol* 1999; 65: 245 - 246.
- [10]. Tindall JP, Smith JG. Skin lesions of the aged and their association with internal changes. *J Am Med Assoc* 1963;186:1039-42.

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