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ORIGINAL ARTICLE

Assessment of cases of adult-onset actinic prurigo

Meenakshi Kapoor

Assistant Professor, Department of Dermatology, Saraswathi Institute of Medical Sciences, Hapur, Uttar Pradesh, India

ABSTRACT:

Background: Although it can occur in other communities, people of Native American origin are primarily affected by the uncommon, persistent, and genetic skin ailment known as actinic prurigo. The present study was conducted to assess cases of adult-onset actinic prurigo. **Materials & Methods:** 65 patients with adult-onset actinic of both genderswere all subjected to skin biopsies, blood testing, and patch tests. Every patient's reaction to treatment was documented. Every patient underwent phototesting. **Results:** Out of 65 patients, 37 were males and 28 were females. Area affected was face in 24, ear in 12, neck in 5, scalp in 10 and dorsum of hands in4 patients. Duration of disease was <6 months in 32 and >6 months in 33 cases. Medical history showedBell's palsy in 1, hypertension in 29, diabetes mellitus in 17 and asthma in 5 cases. Treatmentgiven was antihistamines in 25 cases, topical corticosteroids in 35 and sun protection in 10 patients. **Conclusion:** The dorsum of the hands, face, ears, neck, and scalp were the most frequently impacted areas. In the majority of cases, the illness lasted longer than six months. Antihistamines, topical corticosteroids, and sun protection were the treatments administered.

Keywords: Actinic prurigo, antihistamines, Bell's palsy

Corresponding author: Meenakshi Kapoor, Assistant Professor, Department of Dermatology, Saraswathi Institute of Medical Sciences, Hapur, Uttar Pradesh, India

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INTRODUCTION

Although it can occur in other communities, people of Native American origin are primarily affected by the uncommon, persistent, and genetic skin ailment known as actinic prurigo. It is typified by extremely painful, inflammatory skin lesions that develop on body parts exposed to the sun.[1] Particularly among those with Native American heritage, there is a significant genetic tendency. It is frequently associated with the HLA-DR4 gene. The main cause of actinic prurigo is ultraviolet (UV) from the sun. In spring and summer, when UV exposure is stronger, symptoms usually get worse. Although it can sometimes appear in adults, the illness typically first appears in childhood or adolescent.[2]

The defining sign is intense itching. The skin lesions might be blistering or crusty, and they are frequently red and elevated. They generally show up on parts of the face, neck, arms, and hands that are exposed to the sun. Actinic prurigo frequently causes cheilitis, or inflammation of the lips, which results in dry, cracked, and swollen lips.[3] The conjunctiva, the membrane that covers the white portion of the eyes, may become inflamed in certain people, resulting in redness and irritation. The neck, V-shaped parts of the chest, the dorsum of the hands, the face (lips, nose, brows, and malar regions), and the extensors of the arms and forearms are among the body parts that are exposed to the sun.[4] AlAlthough it has been shown that these patients react to broad-spectrum radiation, such as UVA and UVB light, their minimal erythema dose (MED) to UVB and UVA is usually normal. Adult-onset AP, which is characterized as AP that appears after the age of 21, has been reported, and Asian people are more likely to have this variety. Usually, cheilitis and conjunctivitis are not associated with adult-onset AP. Though it has been shown that these patients respond to broad-spectrum UVA and UVB exposure, their modest.[5]The present study was conducted to assess cases of adult-onset actinic prurigo.

MATERIALS & METHODS

The present study was conducted on 65 patients with adult-onset actinic of both genders. All were informed regarding the study and their written consent was obtained.

Data such as name, age, gender etc. was recorded. They were all subjected to skin biopsies, blood testing, and patch tests. Every patient's reaction to treatment was documented. Every patient underwent phototesting. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 65		
Gender	**Males**	**Females**
Number	37	28

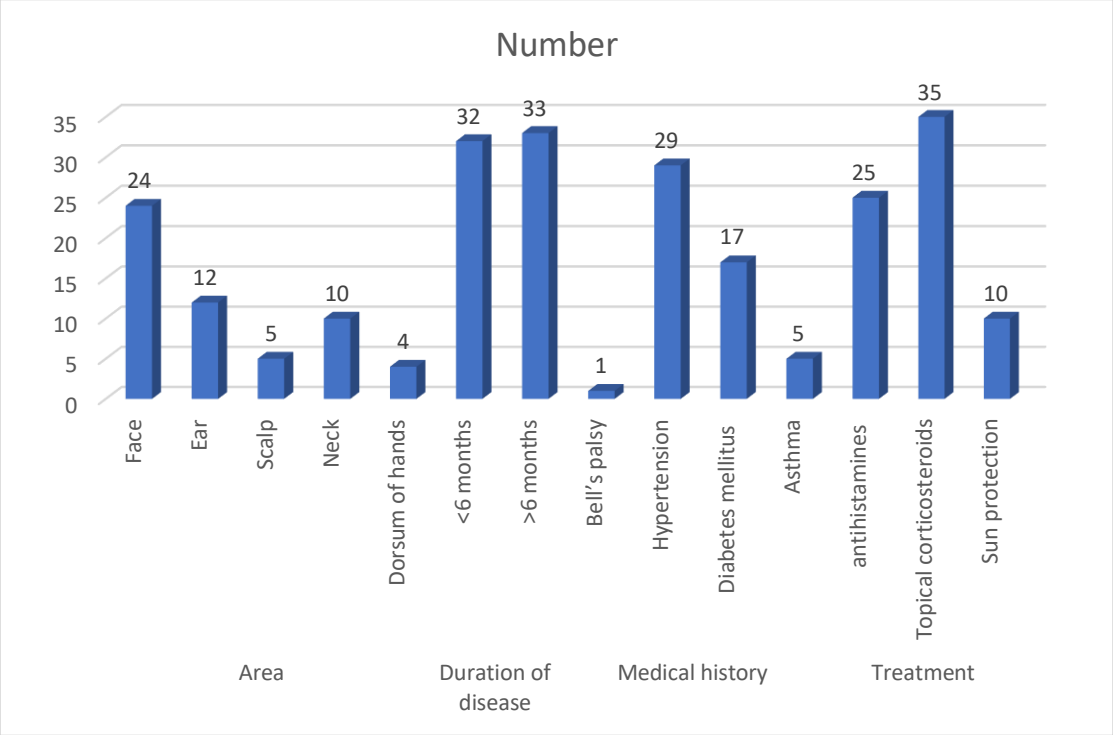
Table I shows that out of 65 patients, 37 were males and 28 were females.

Table II Assessment of parameters

Parameters	Variables	Number	P value
Area	Face	24	0.54
	Ear	12	
	Scalp	5	
	Neck	10	
	Dorsum of hands	4	
Duration of disease	<6 months	32	0.91
	>6 months	33	
Medical history	Bell's palsy	1	0.05
	Hypertension	29	
	Diabetes mellitus	17	
	Asthma	5	
Treatment	antihistamines	25	0.74
	Topical corticosteroids	35	
	Sun protection	10	

Table II shows area affected was face in 24, ear in 12, neck in 5, scalp in 10 and dorsum of hands in4 patients. Duration of disease was <6 months in 32 and >6 months in 33 cases. Medical history showedBell's palsy in 1, hypertension in 29, diabetes mellitus in 17 and asthma in 5 cases. Treatment given was antihistamines in 25 cases, topical corticosteroids in 35 and sun protection in 10 patients. The difference was significant (P< 0.05).

Graph I Assessment of parameters



DISCUSSION

Actinic Prurigo (AP) is a chronic, itchy skin disease caused by an abnormal reaction to sunlight. While AP can occur at any age, it usually begins before the age of ten and usually resolves in adolescence or the early stages of adulthood.[6] AP eruptions are characterized by itchy, frequently excoriated nodules and papules. There is often lichenification, crusting, and eczematization along with secondary infection.[7] Conjunctivitis and cheilitis may also occasionally

occur, especially in Native American patients.[8,9]The present study was conducted to assess cases of adult-onset actinic prurigo.

We found that out of 65 patients, 37 were males and 28 were females. The prognosis and clinical characteristics of actinic prurigo were documented by Lane et al.[10] A total of ninety-three Amerindian patients were presented. The face was the most usually involved location. The main symptoms were pruritus, cheilitis, and a genetic propensity. In the winter, one-third of patients report having some lesions, usually mild ones. Most patients who underwent phototesting had UVA light sensitivity. They discovered that the most crucial factor in identifying the kind of eruption and the patient's prognosis was the age at which actinic prurigo first appeared. Younger onset ages (up to 20 years old) are generally linked to more severe eruptions and cheilitis, and they are also more likely to become better over the course of five years. Adults (21 years of age and up) who experience actinic prurigo typically have a milder and more chronic form of dermatosis.

We observed that area affected was face in 24, ear in 12, neck in 5, scalp in 10 and dorsum of hands in4 patients. Duration of disease was <6 months in 32 and >6 months in 33 cases. Medical history showedBell's palsy in 1, hypertension in 29, diabetes mellitus in 17 and asthma in 5 cases. Treatmentgiven was antihistamines in 25 cases, topical corticosteroids in 35 and sun protection in 10 patients. There were 12 girls and 18 males, according to Akaraphanth R et al.[11] 36.86 years old was the average age at onset. The illness lasted anywhere from one month to twenty years. The most commonly affected area was the forearms (27 patients). The findings of other screening tests were negative. One patient exhibited abnormal MED to both UVA and UVB, while five patients had abnormal MED to UVA. The results of photoprovocation tests revealed that 12 patients (40%), 11 patients (37%), four patients (13.3%), and three patients (10%) had positive reactions to UVA and UVB, respectively. When exposed to visible light, none of the patients responded favorably. Nodular skin biopsies were conducted.

Ker et al[12] determined the clinical characteristics of AP in patients. A total of 11 patients were diagnosed with AP. The mean age at diagnosis was 52 years. There were 9 (82%) Chinese and 2 (18%) Malay patients. Nine (82%) were male and 2 (18%) were female. The most commonly affected areas were the face, forearms, and hands (72%). Phototesting showed reduced minimal erythema dose (MED) to ultraviolet A (UVA) in 5 (46%) patients, both UVA and ultraviolet B (UVB) in 4 (36%) patients and UVB in 1 (9%) patient. Seven (64%) patients reported partial improvement after treatment with a combination of topical corticosteroids and sunscreens. Four (36%) patients received systemic therapy with partial response. In 23 cases, skin biopsies were taken from nodular lesions. Twenty of the 23 individuals had acanthosis, and the histopathology revealed hyperkeratosis ortho- or parakeratosis.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that the dorsum of the hands, face, ears, neck, and scalp were the most frequently impacted areas. In the majority of cases, the illness lasted longer than six months. Antihistamines, topical corticosteroids, and sun protection were the treatments administered.

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