

## LINEAR EPIDERMAL NEVUS WITH NEVUS COMEDONICUS AND MULTIPLE CUTANEOUS HORNS

Sunil A Gandhi and Sudhir B Pujara

A case of linear epidermal nevus with nevus comedonicus involving left side of the body and multiple cutaneous horns on nose, chin and eyelids is reported. Association of all the three disorders is rare.

**Key words :** Linear epidermal nevus, Nevus comedonicus, Cutaneous horn.

Epidermal nevus is a congenital malformation consisting of wart-like over-growths of the epidermis. Nevus comedonicus, consisting of follicular keratin plugs is a rare disorder. Cutaneous horn can appear on normal skin or on a preexisting wart, papilloma, senile keratosis, nevus, corn and calluses, trauma, post-burn scar, etc.<sup>1</sup> Association of cutaneous horns with porokeratosis of Mibelli is reported.<sup>2</sup> However, we could not trace any report describing all the three features of our case in a single patient.

### Case Report

A ten-year-old boy had asymptomatic, linear, warty, slightly elevated lesions restricted to the left side of the nose, forehead and scalp since birth (Fig. 1). More exuberant lesions appeared later on the extremities and trunk. There was no history of acnegenic drugs, nor of topical application of drugs that would cause acne medicamentosa. Lesions on the occipital and left fronto-parietal regions were associated with patchy alopecia. Warty lesions were also present on the neck and chest on left side. He also had comedones arranged linearly in a vertical direction on the abdomen and back, again on the left side. Multiple cutaneous horns were present near the tip of the nose, one on the chin and one each on both upper eyelids (Fig. 1). Fundus



**Fig. 1.** Scalp and face having nevus unius lateris and multiple cutaneous horns.

oculi were normal; corneal opacities were present in both eyes. Clinical examination of other organ systems revealed no abnormality. Haemoglobin, TLC, DLC, urinalysis, stools, X-ray chest and skull were normal. Skin biopsy from a lesion on the forehead revealed considerable hyperkeratosis and acanthosis. Changes of epidermolytic hyperkeratosis were seen at places. Also seen among the acanthotic epidermis were horn cysts. These features suggested the diagnosis of epidermal nevus,

From the Department of Dermatology, Smt SCL Municipal General Hospital, Saraspur, Ahmedabad-380 018, and Sheth KM School of Postgraduate Medicine and Research, Ahmedabad-380 006, India.

**Address correspondence to :** Dr. Sudhir B. Pujara.

A second biopsy from a comedone-like lesion showed a wide deep invagination of the epidermis filled with keratin. In the deeper part of the invagination, a transversely cut hair shaft was visible.

Biopsy of a cutaneous horn showed massive hyperkeratosis. The cells in the upper epidermis showed perinuclear clear spaces, along with squamous pearls in the epidermis and palisading of basaloid cells. It was concluded that the cutaneous horn had appeared on an underlying epidermal nevus.

#### Comments

Most of the children affected with nevus lateris are otherwise normal, though the disorder may be associated with various other conditions. Such cases are referred to as the epidermal nevus syndrome.<sup>3</sup> Some of the comedonic nevi are present since birth; others may develop before the age of 20. These usually show little tendency to extension.

In some instances, histopathologic examination of a lesion of unilateral linear nevus reveals features of acantholytic dyskeratosis as seen in Darier's disease. For this variant, the name acantholytic dyskeratotic epidermal nevus is suggested. The histopathologic picture as found in most linear epidermal nevi can be

easily differentiated from verruca vulgaris, seborrheic keratosis and acanthosis nigricans.<sup>4</sup> Basal cell and squamous cell carcinoma are rare complications.<sup>5</sup> Cutaneous horns are often benign, but sometimes malignant; so even though curettage and fulgeration are curative in either case, each removed lesion should be submitted for histopathologic examination.<sup>6</sup> The association of two nevoid conditions and multiple cutaneous horns is very rare.

#### References

1. Garg BR, Lal S and Arunthathi S : Multiple cutaneous horns with absorption of terminal phalanges, *Ind J Dermatol Venereol Leprol*, 1973; 39 : 81-83.
2. Radhakrishnamurthy K : Porokeratosis Mibelli with cutaneous horns, *Ind J Dermatol Venereol Leprol*, 1972; 38 : 168-170.
3. Rook A : Nevi and other developmental defects, in : *Textbook of Dermatology*, Third ed, Editors, Rook A, Wilkinson DS and Ebling FJG : Blackwell Scientific Publications, Oxford, 1979; p 166-170.
4. Lever WF and Lever GS : *Histopathology of the Skin*, 6th edition, JB Lippincott & Co, Philadelphia, 1983; p 473-474.
5. Swint RB and Klaus SN : Malignant degeneration of an epithelial nevus, *Arch Dermatol*, 1970; 101 : 56.
6. Domonkos AN, Arnold HL and Odam RB : *Andrews Diseases of the Skin*, Clinical Dermatology, 7th ed, WB Saunders Company, Philadelphia, 1982; p 792-794.