Asymptomatic Linear Lesions Over Chest and Axilla

A 23-year-old male patient presented for evaluation of asymptomatic skin lesions on the right side of the chest extending along his right axilla that had been gradually progressing since its onset about 4 years back. There was no significant past medical history and he did not have any pain or itching over his skin lesions. Dermatological examination revealed multiple verrucous brown-black velvety plaques with soft ridges and well-defined margins, in a linear fashion over the lateral aspect of the right side of the chest extending along the right axilla [Figure 1]. There was no cervical or axillary lymphadenopathy. Dermoscopy of the lesion revealed cerebriform structures with scattered black and dark brown globules and dots [Figure 2]. Skin biopsy of the lesion showed hyperkeratosis, mild acanthosis, papillomatosis, and hyperpigmentation of the basal layer [Figure 3].

**Question**
What is your diagnosis?

**Answer**
Nevoid acanthosis nigricans.

**Discussion**
Acanthosis nigricans generally presents as symmetrical, hyperpigmented, velvety cutaneous skin thickening that generally involves the nape and the sides of the neck, axillae, groin, popliteal and antecubital surfaces, and umbilical area.\(^1\) It is a cutaneous marker most frequently associated with insulin resistance and less frequently a marker of internal malignancy. Nevoid acanthosis nigricans is a rare presentation that has a morphologic pattern similar to other forms of acanthosis nigricans that may first become evident at birth, in childhood, or during puberty.\(^2\) It is generally not associated with endocrinopathies, malignancies, drugs, or syndromes.\(^2\) This condition is inherited as an irregularly autosomal dominant trait. The natural history of this condition is an insidious zosteriform appearance of skin lesions.

**Figure 1:** Multiple brown–black velvety plaques with soft ridges and well-defined margins over the lateral aspect of the right side of chest and axilla in a linear zosteriform distribution

**Figure 2:** Dermoscopy of the lesion showing linear crista cutis and sulcus cutis with scattered black and dark brown dots and globules (10× magnification)

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lesions over few months around puberty and then it attains stability with no tendency for resolution.[3] The first clinical description of this clinical entity was published in 1991 when it was observed in a case of neurofibromatosis.[4] According to literature, this condition has been included in the syndromic variants of acanthosis nigricans or in the “other” nonspecific causes of acanthosis nigricans.

The distribution of the lesions along a linear zosteriform pattern [Figure 1] and the verrucous appearance of the plaques gave the impression of linear verrucous epidermal nevus; however, dermoscopy of the lesion revealed linear crista cutis and sulcus cutis with scattered black and dark brown dots and globules [Figure 2]. Dermoscopy of linear verrucous epidermal nevus shows alternating red and brown glomerular-type structures over a white background. Dermoscopy showed distinctive feature of acanthosis nigricans and the histopathologic findings included hyperkeratosis, mild acanthosis, papillomatosis, and hyperpigmentation of the basal layer [Figure 3], which are characteristics of acanthosis nigricans.[3] Linear verrucous epidermal nevus, which has a more compact orthokeratotic stratum corneum and shows more marked acanthosis, was ruled out histologically. Seborrheic keratosis and lymphangioma circumscriptum can rarely present in a linear distribution; however, they have distinctive histopathological features of horn pseudocysts and dilated lymphatic channels containing eosinophilic proteinaceous material in the papillary dermis respectively which were absent in the present case.

The course of the disease is usually benign and improvement of the skin lesions can be obtained using topical retinoids, calcipotriol, and ablative laser treatment.[2] This case highlights the differentials to be considered in a case of linear zosteriform lesions in a young male.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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**Conflicts of interest**

There are no conflicts of interest.

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