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Case Report

Swelling in axilla - A rare diagnosis

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ABSTRACT

Seborrheic keratosis in axilla is a very rare finding. Here, we describe the case of a 46-year-old woman who visited a dermatology Opd and complained of a lesion over her left axilla that had been there for six years. On examination single pedunculated cerebriform nodules black-tan in color surrounded by hyperpigmented halo at its base, firm to palpate, painless present over left axilla, it was non-bleeding. The histopathological examination revealed seborrheic keratosis which is a very rare in axilla.

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1. Introduction

Seborrheic keratosis (SK) a frequent benign, pigmented epidermal lesion that usually affects middle-aged and older people, can also present in young adults.^{1,2} It is also a common non-cancerous lesion that usually occurs on body regions exposed to sunlight. It can be identified by well-defined, waxy, verrucous, pigmented papules or plaques that are typically found on the sun-exposed areas especially face, trunk, and extremities with the exception of the palms and soles, most commonly occur in face and upper trunk.² Recent studies show, the ageing population has led to a rise in the frequency of SK cases with malignant alterations. It may develop into malignant lesions and share size, shape and structure (morphological) characteristics with other lesions. It is caused by the benign proliferation of immature keratinocytes. They are typically slow-growing. There is no variation in occurrence between the sexes.³ On the other hand, populations with lighter skin tones seem to be more susceptible to seborrheic keratosis. Thus, it is imperative to do histological examinations and provide appropriate treatments subsequently, particularly for individuals who

have a high suspicion of malignancy.^{4,5} The incidence of SK increases with age, and in axilla site of SK is very unusual clinical manifestation and although the cause is still unknown.⁵ Here we now present the case of a 46-year-old female who had single pedunculated cerebriform nodules, black-tan in color surrounded by hyperpigmented halo at its base, firm to palpate, painless present over left axilla, after biopsy, were consistent with SK.

2. Case Report

The 46-year-old female patient reported to the dermatologic opd with complain of single black-tan, uneven shaped, pedunculated lesion on her axilla.

In physical examination, lesion stuck to the skin, lesion of which measured 3x4 cm. The lesion had been there for the previous 6 years. Over the previous three to four years, the lesion size and appearance had changed. The patient had no medication history, no other medical issues, and no family history of SK. A dermatologist took a biopsy from the lesion with differential diagnosis of (Buschke-Lowenstein tumor, Melanoacanthoma), which was then sent to our pathology department for analysis.

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The microscopic results showed that the lesion were consistent with SK. The histological study revealed epidermal hyperkeratosis, papillomatosis, and extensive acanthosis of the epidermis with towards upside growth of basaloid keratinocyte proliferation with horn pseudocyst development. There is mild to moderate lymphocytic infiltration in the dermis. There was no evidence of dysplasia.

2.1. Gross

A multiple black-tan in color and firm in consistency, soft tissue piece altogether measuring 1.5x1.5 cm was received at our histopathology department. The surface is uneven. All processed were taken, then tissue was processed and routine H & E staining was done.

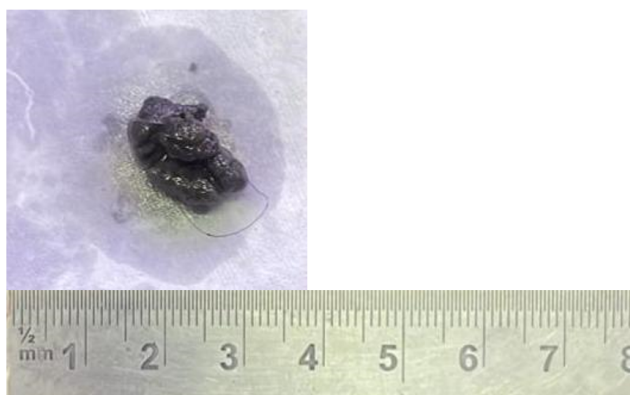


Figure 1:

3. Microscopy

Under light microscope Figure 2 (H&E;10x4), showed skin lining, lined by stratified squamous epithelium with epidermal hyperkeratosis, papillomatosis and extensive acanthosis without any dysplasia. Horn psuedocyst formation are also seen. The underlying dermis shows chronic inflammatory infiltrate comprising of lymphocytes and unremarkable periappendigeal structures. On Figure 3 (H&E;10x10) shows a cell have a basaloid proliferation with interspersed horn cyst filled with keratin.

4. Discussion

Seborrheic Keratosis (formerly called seborrheic wart or hyperkeratotic papillary seborrheic wart) is an important and common benign skin lesion with slow growth and frequent epithelial tumor.¹ It occurs mainly in elderly subjects over 50 years of age, but in our case age was 46 year old. It occurs mainly on the face and trunk but rarely in the axilla, as found in our case. Due to its distinct morphological features, it may be misdiagnosed or present with several cancers that require close monitoring.

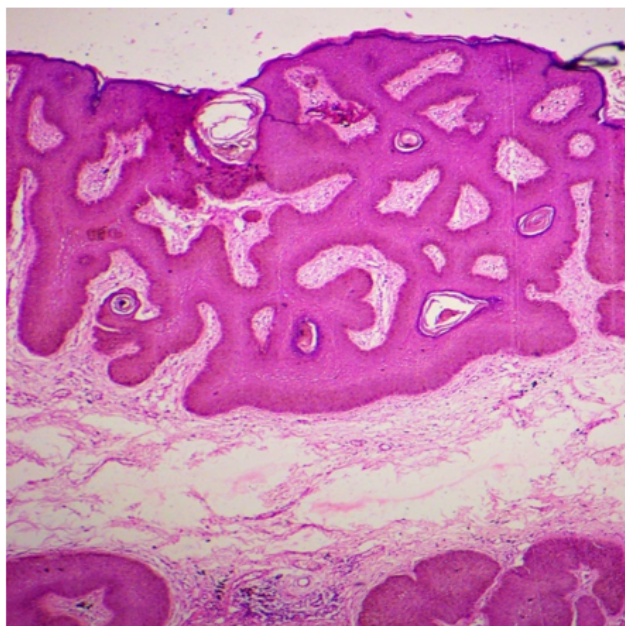


Figure 2: (H&E; 10x4)

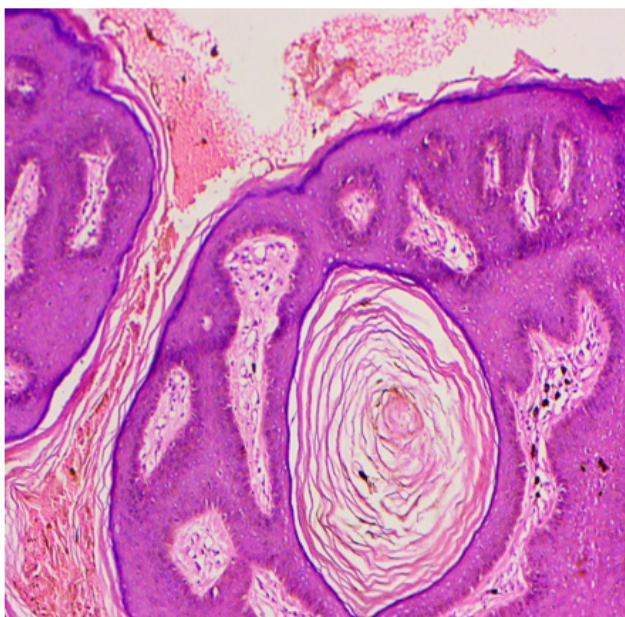


Figure 3: (H&E;10x10)

The clinical appearance of seborrheic keratosis is quite common; they show as elevated, well-limited, flat lesions that resemble skin lesions. They also have a squamo-keratotic appearance and range in hue from brown to black.

In our instance, there were single pedunculated cerebriform nodules over the left axilla that were black-tan in color, firm to the touch, painless and non-bleeding. At the base of each node was a hyperpigmented halo.

The cause of seborrheic keratosis is unknown, yet it could develop after an inflammatory dermatosis or at a site of recurrent rubbing. Our patient did not have a genetic predisposition to this condition.^{6,7}

Seborrheic keratosis, giant SK, an atypical SK, is rarely reported on the head, genitals or face on previous studies. However, at the time of this study, no case of seborrheic keratosis was reported on the axilla part. This study presented a rare case of SK located on a non-sun-exposed body area.⁷

Seborrheic keratoses shows significant six basic histological subtypes, these are acanthotic type, hyperkeratotic type, clonal type, adenoid or reticular type, irritated or inverted follicular type and melanoacanthoma. It was determined that the acanthotic type (93 cases, 45.1%) was the most common histopathological subtype.⁸

4.1. Acanthotic type

It is a most common histopathological type of seborrheic keratosis. The epidermis is thickened and show marked acanthosis of basaloid cells along with several keratin and keratin pseudo-horn cysts. There are also exist actual horn cysts, which resemble pseudo-horn cysts in that they only have a very thin granular layer and exhibit abrupt, total keratinization. Papillomatosis and hyperkeratosis are moderately seen.⁷ Though the thicker epidermis only contains thin papillae in some cases. About one third of the specimens stained with hematoxylin-eosin show excess levels of melanin, while with silver show two third of the specimen stained. In sub-epidermis seborrheic keratosis, a mononuclear inflammatory infiltrate is commonly observed. Occasionally, an acanthotic seborrheic keratosis will become an in situ carcinoma, a condition known as the “bowenoid transformation”. It appears to happen more often in lesions on skin that has been exposed to the sun. Rarely, an acanthotic seborrheic keratosis may develop a basal cell epithelioma that spreads into the underlying dermis.^{7,8}

4.2. Hyperkeratotic type

The hyperkeratotic type, also called the digitate or serrated type, has a marked papillomatosis and hyperkeratosis while acanthosis is less visible. Church spires are usually resemblances to the many digitate outwards appendages of epidermis-lined papillae. Melanin, horn cysts and pseudo-horn cyts are less frequent than in the acanthotic type. Also are less pigmentation.⁸

4.3. Clonal type

Well defined nests of basaloid cells found within the epidermis (hallmark). Sometimes the nuclei of the nests seem small and dark-staining, and only a few places show intercellular bridges, resembling foci of basal cell epithelioma.^{8,9}

4.4. Adenoid type

It is characterized by the branching and interweaving of many thin tracts of epidermal cells in the dermis that originate in the epidermis. Several tracts consist of merely two rows of basaloid cells. The adenoid variety of seborrheic keratosis typically exhibits pronounced hyperpigmentation in its basaloid cells. Purely adenoid lesions lack both horn cysts and pseudo-horn cysts. A strong correlation has been observed between the adenoid type of seborrheic keratosis and solar or senile lentigo senilis, based on both clinical and pathologic findings.^{8,9}

4.5. Inverted or irritated follicular type

The characteristic feature of irritated follicular seborrheic keratosis is usually inflammation, which spreads to the surrounding skin. Squamous cells are characterized by the abundance of whorls or eddies made up of eosinophilic, flattened squamous cells organized in an onion-peel pattern, which resembles poorly differentiated horn pearls. Their high number, tiny size, and restricted structure allow these "squamous eddies" to be easily distinguished from the horn pearls of SCC. More squamous cells than basaloid cells are usually present. Irritated seborrheic keratoses vary from inflamed seborrheic keratoses in that the inflammation underlying them is typically minimal or non-existent.^{8,9}

4.6. Melanoacanthoma type

It is a benign mixed tumor of melanocytes and keratinocytes. A significant increase in the concentration of melanocytes sets this rather rare type of pigmented seborrheic keratosis apart from the common sort.⁸ Instead of only residing at the base layer of the tumor, many melanocytes were distributed throughout the lobules. On rare occasions, discrete islands of basaloid cells mixed heavily with melanocytes can be seen within the tumor.⁹

Differential diagnosis based on the location are as following:

1. Acanthosis nigricans
2. Melanoma
3. Epidermal nevus
4. Actinic keratosis
5. Verruca vulgaris
6. Basal cell carcinoma

5. Conclusion

Although seborrheic keratosis on the axilla part is very rare finding. Therefore, it needs to be considered when handling with axilla growth. Consequently, benign tumor that is known to be vulnerable to recurrence such as seborrheic keratosis should be complete resection as thorough as feasible to prevent recurrence.

6. Ethics Approval

Ethical approval obtained from institutional ethics committee of Era's Lucknow Medical College & Hospital.

7. Consent for Publication

Consent was given by the patient.

8. Availability of Data and Material

All data available from corresponding author.

9. Conflict of Interest

None.

10. Authors Contribution

All authors contributed equally in the preparation of manuscript.

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