



Case Report

Breast horn; A rare case presentation

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ABSTRACT

Introduction: Breast Cutaneous Horn is a rare case whereby they are basically just nodules composed of keratin projecting above the surface the skin.

Presentation of case: A 63-year-old lady, para 6 presented with a horn like growth for the past 2 years associated with itchiness. The horn increased in size to about a length of 5 cm associated with on and off itchiness over the horn. No signs and symptoms of malignancy. As comorbidities, patient has hypertension and dyslipidemia which is well controlled on medications. An ultrasound of the breast revealed cutaneous lesion at upper quadrant associated with adjacent skin thickening and no extension into breast parenchyma. A bedside excision was done and the specimen was sent for Histopathology. Histopathology of the lesion revealed Verruca Vulgaris.

Discussion: This case brings to our attention a rare presentation of cutaneous horn over the breast along with its histological findings helping us to distinguish it with other similar cases. Best management would be by excision and to making sure to get a good specimen of the base for dermatopathological evaluation purpose.

Conclusion: Cutaneous horns are usually benign lesions. However, there are chances of it being malignant. Therefore, it is best for early intervention such as excision followed by histopathological review for further thorough management.

1. Introduction

Cutaneous horns are also known as cornu cutaneum and is considered a rare entity in relation to the Asian population however not so rare amongst the Caucasians [1]. It most specifically occurs in areas of the skin that are commonly exposed [2]. Cutaneous horn is basically just nodules composed of keratin projecting above the surface the skin and The aetiology behind the massive retention of keratin is still a mystery. Usually, the cutaneous horns occur along with an association to some cutaneous disease that often is malignant [3]. It is closely associated with cutaneous disorders that can be benign, pre malignant or even malignant such as seborrheic keratosis, actinic keratosis, squamous cell carcinoma, Verruca Vulgaris or Bowen's disease [3]. We report here a case of unilateral breast Verruca Vulgaris in a 63-year-old lady based on SCARE care report guideline 2020 [4].

2. Case presentation

A 63-year-old lady, para 6 presented with a horn like growth for the past 2 years associated with itchiness. The horn increased in size to

about a length of 5 cm associated with on and off itchiness over the horn (Fig. 1). As comorbidities, patient has hypertension and dyslipidemia which is well controlled on medications. An ultrasound of the breast revealed cutaneous lesion at upper quadrant associated with adjacent skin thickening and no extension into breast parenchyma. A bedside excision was done and an adequate margin was excised of the base and the specimen was sent for histopathology. Histopathology of the lesion revealed Verruca Vulgaris. The following patient has gone for a dermatological check-up where they confirmed that patient has no warts elsewhere and does not have any other skin condition. Her scar from the biopsy is well healed and does not show any signs of recurrence after follow up for 6 months. As of this writing she is in good health and shows no signs of recurrence.

3. Discussion

Based on various studies done, it is quite clearly stated that cutaneous horns are rare and there are no definite patterns for such occurrence. However, the usual victims are of the elderly age group with an average age range of 50–80 years old. Both male and females are equally

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Fig. 1. Left breast horn.

affected however, the men obtain a higher risk of having a malignant type in comparison to the women [1].

The word 'cutaneous horn' is basically depicting its morphologically to a unified keratinized substance not diagnosis by pathology. The aetiology behind the massive retention of keratin is still a mystery. Usually, the cutaneous horns occur along with an association to some cutaneous disease that often is malignant [3].

Cutaneous horns usually appear as elongated projections ranging from a couple of millimetres to centimetres. It could also be described as a ram's horn. It gradually grows over the years and the longest that had been reported grew until 25cm. The horn's base may appear flat or crateriform. If there is inflammation and tenderness over the base then it most likely represents malignancy. Most common location for the occurrence of these cutaneous horns are scalp and upper face. However, it might also occur in areas exposed to sun such as chest, shoulder, neck as well as areas not exposed to sun such as the penis [5]. In relation to the current patient in this case, the cutaneous horn appeared at her left breast upper outer quadrant and it gradually grew in length over the years to 5 cm of length. As for the base of the cutaneous horn, it does not appear inflamed, no associated skin changes and there is no tenderness.

In many histopathology reports of cutaneous horns, it revealed hyperkeratosis, papillomatosis with koilocytes showing perinuclear halo and it has no evidence of malignancy. These findings were in par with Verruca Vulgaris or in other words known as viral warts [6]. Based on a study conducted, it was shown actinic keratosis was the most common type followed by common warts also known as Verruca Vulgaris and followed by squamous cell carcinoma and seborrheic keratosis [7].

The prognosis of such rare case as this cutaneous horn depends on the severity of the disease itself. The entity itself being malignant or benign plays a very important role in determination of its prognosis. Of course, with that being said, its clear cut that the benign cases stand a better prognosis compared to the malignant. Besides that, another factor that evaluates its severity is the fact that the biopsy of the horn itself whether the base of the horn was completely removed or not during the biopsy. In relation to that, another important factor that plays a role in the prognosis of such rare cases is the patient themselves. Some due to certain causes might seek treatment later on and that might lead to the

disease reaching an extensive peak. This may be due to the socio-economic status or even in denial state [8]. Follow up on the dermatological condition and immediate treatment in cases of recurrence is recommended [9]. The following patient has gone for a dermatological check-up where they confirmed that patient has no warts elsewhere and does not have any other skin condition. Her scar from the biopsy is well healed and does not show any signs of recurrence. In such cases, recurrence would usually occur when the base has some remnant that was not removed adequately during the biopsy. This over time would tend to cause the horn to grow back. Thus, it is of utmost importance that the base is removed adequately.

Therefore, in such rare cases like this, the only way of preventing such condition is by tackling it from the start by doing a biopsy and removing it along with sufficient amount of its base. Subsequently, it is crucial for the patient to undergo close follow up to ensure it does not recur as recurrence may be a sign of malignancy and the approach for that sort of cases would need to be rather drastic.

4. Conclusion

Breast cutaneous horns are extremely rare conditions. It is closely associated with multiple skin disorders that may be malignant or benign. The most warranted treatment for it is biopsy and to make sure the base of the lesion is adequately removed to avoid recurrence [10].

Ethical approval

Ethical approval obtained from local institution.

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Author contribution

Siti Zubaidah Sharif, Ho Kah Yee and Nik Amin Sahid Nik Lah initiated, planned the case report. Bhirrinta Varughese did the writing of the manuscript. Nik Amin Sahid supervised, reviewed and edited the manuscript.

Guarantor

Bhirrinta Varughese will be the guarantor and accepts full responsibility for the work and/or the conduct of the study, had access to the data, and controlled the decision to publish at this given time of submission.

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Consent

Patient consented for the write up and publication.

Declaration of competing interest

The authors declare that there are no conflicts of interest.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.amsu.2022.103598>.

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