Original Article

Verrucous carcinoma: Unusual presentation

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Abstract

This is a case of unusual presentation of verrucous carcinoma. A 60 yrs old female patient presented with swelling on her left forearm. In the past, she undergone some surgical procedure of excision of small swelling on the same site, of which history was not known. Now she had slowly growing, exophytic swelling of 10 x 10 cms in size. Its Surface was having many spicules. We did wide local excision and split skin grafting. On histopathology it turned verrucous carcinoma. This is an unusual presentation. It is an unique case.

Keywords: Basement membrane, epidermoid carcinoma, Hyperkeratosis, Papillomatosis, parakeratosis, recurrence, skin grafting, Verrucous carcinoma.

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INTRODUCTION

In 1948, Ackerman first described varrucous carcinoma, a low grade tumor that generally considered a clinicopathogenic variant of squamous cell carcinoma.[1] Verrucous carcinoma is a distinctive aetiology, clinicopathological variant of squamous cell carcinoma which may involve the oral cavity[2], larynx, oesophagus and skin[3,4]. Verrucous carcinoma is an extremely well differentiated type of epidermoid carcinoma, also known as epithelioma cuniculatum.[5,6,7] It appears as an ulcerated, fungating and polypoidal mass with openings of sinus tracts on to the skin. Cutaneous lesions are usually in the genitocrural area[8]or on the plantar surface of foot.[5,6] Although exceptionally it can arise from any part of skin surface.[9,10] Plantar lesions are the most common form of verrucous carcinoma[5]. They are usually exophytic, pale lesions, sometimes with draining sinuses[7]. They are often painful and tender. Similar lesions have been reported on the palm and the thumb[11,12]. Local invasion is the rule and extension to bone is frequent but nodal metastasis are exceptional[13,14]. Some factors are implicated in aetiology of verrucous carcinoma such as trauma and chronic irritation[15] and human papillo virus (HPV) in genitocrural lesions.[9]

CASE REPORT

A 60 years old female, housewife, resident of Ganpur, Taluka Chopda, District Jalgaon, came in Surgical OPD. She had swelling on her left mid forearm. In the past, she undergone some surgical procedure of excision of small swelling on the same site of which history was not known. Now she had swelling from one and half years of duration on her left mid forearm. It was slowly growing, no H/o sudden increase in size, no H/o any discharge, no H/o bleeding or no H/o Systemic effects.

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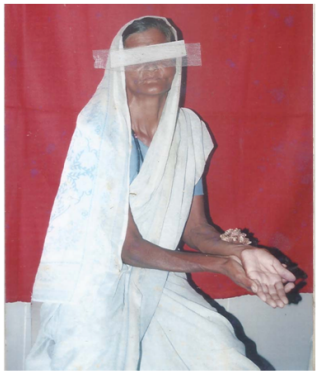


Figure 1

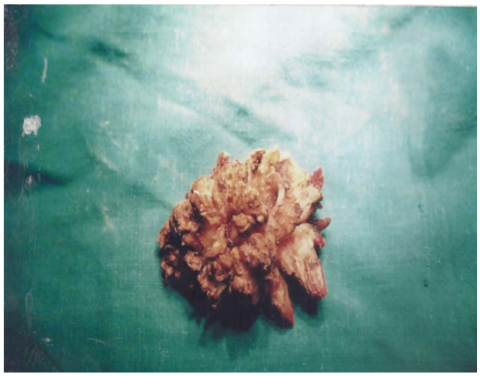
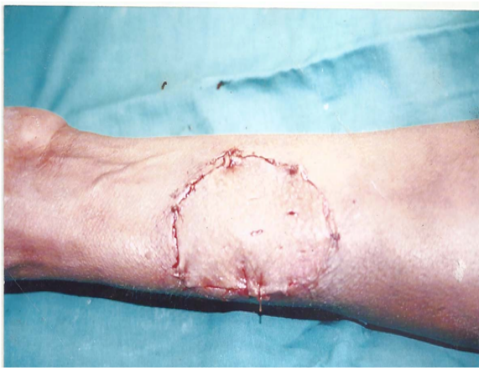


Figure 2



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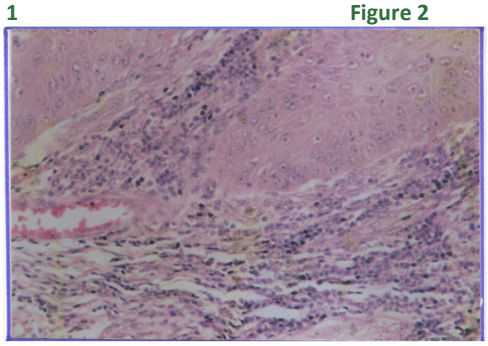

Figure 4

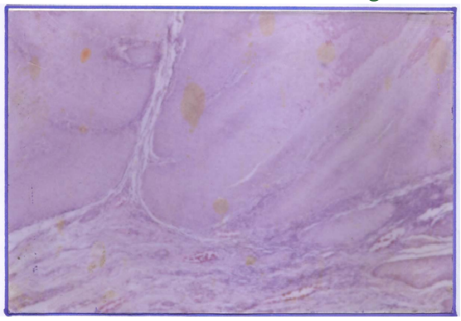

Figure 5

Legend

Figure 1: 60 yrs old lady presented like a flower kept on left mid forearm

Figure 2: Removed specimen, gross pathology, exophytic papillary growth of verrucous carcinoma.

Figure 3: We did wide local excision and then split skin grafting.

Figure 4: The endophytic part shows bulbous rete pegs, mostly comprised of large well differentiated squamous cells with severe degree of anisonucleosis.

Figure 5: Basement membrane appears intact throughout.Occasional keratin filled cyst seen.

On Examination: The growth was on left mid forearm, 10 x 10 cms in size. Exophytic growth, the surface was having many spicules. There was no e/o local edema, no e/o satellite nodules, no e/o surrounding skin pigmentation or change in colour, no other swellings over any part of body. There was no e/o bleeding, no e/o discharge and no e/o foul smell. There was no e/o muscle infiltration. Movements at adjacent joints were normal (elbow, wrist and digital). On radiological examination[16], on X-ray forearm ap and lateral view, there was no any bony invasion or no any deep structure involved on ultrasonography of local region.There was no lymphadenopathy in axilla or cubital region. X- ray chest was normal. Ultrasound abdomen was normal.

Clinically, it does not suggest squamous cell carcinoma, Basal cell carcinoma, malignant melanoma or viral warts. We had done wide local excision and skin grafting. We discharged the patient on 8th day with healthy wound and good recovery.

Histopathology Report

051432: Received specimen showing exophytic papillrary growth. Papillary projections shows whitish appearance with yellow discoloration distally. Multiple sections studied. There was no infiltration in the deeper tissues.

01.06: Section shows exophytic growth with papilomatosis, with covering of hyperkeratosis, parakeratosis. The endophytic part shows bulbous rete pegs mostly comprised of large well differentiated squamous cells with severe degree of anisonucleosis. These projections are acanthotic and blunted. Basement membrane appears intact throughout. Occasional keratin filled cyst seen. There is infiltrate by round cells and occasional abscess in the vicinity of bulbous downgrowth.

DISCUSSION

1) Verrucous carcinoma itself is a rare variety of squamous cell carcinoma[1]. (Rare Case)
2) The classic location is oral cavity[2]. In oral cavity most common sites are buccal mucosa and lower gingiva[3]. Other sites are larynx, nasal cavity, esophagus, penis, anorectal region, vulva, vagina, uterine cervix. Cutaneous lesions are rare and usually on sole[5,6]. Exceptionally it can arise from

any part of skin surface[9,10]. In our case, the site was left mid forearm which is very rare site. (Unique case)

3) In our case, histopathology matches with the classic description as above[5]. It shows both exophytic growth with papillomatosis and covering of hyperkeratosis and basement membrane intact with good cytologic differentiation throughout the tumor. Though the site and size is unusual, it has classic histopathology (Unique Case)
4) In our case, past history of inadequate excision was present. So verrucous carcinoma recurred? If it is so, recurrence of verrucous carcinoma on extremity after inadequate excision. (Unique Case)

Verrucous Carcinoma

Background: In 1948, Ackerman first described verrucous carcinoma a low grade tumor that generally considered a clinicopathogenic variant of squamous cell carcinoma.

Pathophysiology: Verrucous carcinoma is a distinctive clinicopathological variant of squamous cell carcmoma which may involve the oral cavity, larynx, esophagus and skin. Verrucous carcinoma is an extremely well differentiated type of epidermoid carcinoma, also known as epithelioma cuniculatum. It appears as an ulcerated, fungating and polypoid mass with openings of sinus tracts onto the skin. Cutaneous lesions are usually in the genitocrural area or on the plantar surface of foot.

Although exceptionally it can arise from any part of the skin surface, plantar lesions are the most common form of verrucous carcinoma. They are usually exophytic, pale lesions, sometimes with draining sinuses. They are often painful and tender. Similar lesions have been reported on the palm and the thumb. Local invasion is the rule and extension to bone is frequent but nodal metastasis are exceptional. It is regarded as the cutaneous counterpart of the more common verrucous carcinoma of the oral cavity and other mucosal membranes.

Aetiology: Various factors have been implicated in aetiology of verrucous carcinoma. The chewing of tobacco or betal nuts may predispose to oral lesions, while human papillo virus (HPV) have been implicated in the aetiology of genitocrural lesions. In cases of plantar verrucous carcinoma, contagious warts may have been of aetiological significance. Trauma and chronic irritation have also been implicated in the aetiology.

Staging : Most verrucous carcinomas are non metastatic and are staged based on size, as follows.

T 0 - lesions - in situ.
T 1 - lesions - less than 2 cms in diameter.
T2 - lesions - between 2-4 cms in diameter.
T3 - lesions - greater than 4 cms diameter.
T 4 - lesions - invasion of muscle or bone.

Management: Resection(excision) is the treatment of choice. If surgery is inadequate, the tumour will recur. Other modalities are radiation, mohs surgery, laser surgery, etc.

Histopathological Study: Histopathological study was done at Department of Pathology S.B.H.Government Medical College, Dhule. It turns “Verrucous carcinoma”, a variant of (squamous cell carcinoma). This is a rare presentation of such malignancy, presenting as exophytic growth which looks like a flower kept on forearm.

Histopathology: The most important differential feature with epidermoid carcinoma is the good cytologic differentiation throughout the tumor. The lesions are both exophytic with papillomatosis and a covering of hyperkeratosis and parakeratosis and are endophytic. The rete pegs have a bulbous appearance and are composed of large, well differentiated squamous epithelial cells with a deceptively benign appearance. These acanthotic down growth sometimes extend in to the deep reticular dermis. They are blunted projections in contrast to the uneven, sharply pointed, jaggered downgrowth seen in seudoepitheliomatous hyperplasia. There is usually only very low mitotic activity and this is confined to the basal layer. The downgrowths are mostly contained by an intact basement membrane although frankly invasive features are sometimes present. Keratin filled cysts may develop within the tumor mass. The fibrous stroma surrounding the epithelial downgrowth contain ecstatic vessels and a variable infiltrate in which eosinophils are sometimes present. Intraepidermal abscesses are often presents in lesions of long standing verrucous carcinoma should be distinguished from the exceedingly rare papillary variant of squamous cell carcinoma which is purely exophytic lesion in contrast to the mixed endophytic and exophytic character of verrucous carcinoma.

CONCLUSION

In our study, the variety of squamous cell carcinoma i.e. verrucous carcinoma presented like a flower kept on forearm . The site was left mid forearm. .That was an unusual site, with unusual big size too. There was history of some surgery ?recurrence, which was also uncommon. Considering the type of squamous cell carcinoma, the unusual site, big size of tumor and the recurrence, we call it as unusual or unique case!

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