

## Case report

### **Verrucous Carcinoma of the anus : A case report and literature review.**

#### **ABSTRACT:**

Verrucous carcinomas are rare, low-grade warty exophytic squamous cell carcinomas. Verrucous Carcinoma (VC) is a variant of squamous cell carcinoma discovered by Lauren in 1948. Verrucous carcinoma can be associated with local recurrences; It develops relatively slowly, and lymph node metastasis and distant metastasis are rare. Verrucous carcinoma generally grows by direct extension. Here we present a case of 50 years male smoker who presented with perianal swelling. The patient underwent a biopsy and histopathology was suggestive of verrucous carcinoma with a focus on well-differentiated Squamous cell carcinoma. MRI pelvis done on 25.12.2021 s/o of large poorly marginated infiltrating mass lesion measuring 71x58x 42 mm centred in the skin and subcutaneous planes of left perianal region focally extending into left ischioanal fossa closely abutting the external sphincter at 3-4 o'clock position below the levator plane. No extension into inter sphincteric and supra levator area seen. Enbloc excision of the perianal tumour with iliac and inguinal node dissection was done, the patient had recurrence after 1 year and repeat surgery was done, Post-surgery scans were suggestive of residual disease and locally advanced disease. The patient was subjected to chemotherapy and is now on follow-up.

**Keywords:** Verrucous carcinomas, Squamous cell carcinoma, Recurrence.

#### **INTRODUCTION**

Verrucous carcinomas are rare, low-grade warty exophytic squamous cell carcinomas. Verrucous Carcinoma (VC) is a variant of squamous cell carcinoma discovered by Lauren in 1948 [1]. Verrucous carcinoma can be associated with local recurrences; It develops relatively slowly, and lymph node metastasis and distant metastasis are rare [2,3,4]. Verrucous carcinoma generally grows by direct extension. The most frequent sites for VC are the oral cavity, vulva, and foot [3-5], but there are a few reports of VC in the anus. Risks for the onset of VC include injury, burn, chemical stimulation, chronic inflammation, poor hygiene or incontinence, and HPV infection [6]. Recent studies suggest that VC at other sites is not associated with human papillomaviruses (HPV).[7].

Most cases begin with a small wart that progressively enlarges over several months. Chief complaints at the time of initial presentation range from concern for abnormal lesions, itching, and discomfort, to hindrance of daily activities depending on the size and extent of local lesion involvement.

The initial treatment of verrucous carcinoma has almost always been surgical. The good results obtained have been accomplished in cases in which the lesion, although large, was extirpated with wide margins. However, recurrences are frequent [8.]. Radiotherapy is not recommended due to the risk of iatrogenic anaplastic transformation as well as further regional and distant metastasis [9]. Here we present a case of verrucous carcinoma of the anal canal which after getting operated had a recurrence and repeat surgery was done, Post-surgery scans were suggestive of residual disease and locally advanced disease. The patient was subjected to chemotherapy and is now on follow-up.

## Case Report

A 50-year male smoker presented with perianal swelling in 2021. The patient underwent a biopsy and histopathology was suggestive of verrucous carcinoma with a focus of well-differentiated Squamous cell carcinoma. In 2021. MRI pelvis done on 25.12.2021 s/o of large poorly margined infiltrating mass lesion measuring 71x58x 42 mm that was uniformly hypointense on T1W1 and mildly hyperintense on T2W1 centred in skin and subcutaneous planes of left perianal region focally extending into left ischioanal fossa closely abutting the external sphincter at 3-4 o'clock position below the levator plane. No extension into intersphincteric and supra levator area seen. The lesion was abutting focally the left gluteus maximus muscle with loss of intervening fat planes and solitary left inguinal node. PET CT was done on 3.01.2022 suggestive of metabolic active large, heterogeneously, enhancing, poorly margined soft tissue density mass in the left perianal region infiltrating the anus, medial fibres of the left gluteal muscles with extension in the left ischioanal and ischioanal fossa. Metabolic active few discrete lymph nodes noted in the left internal iliac, external iliac and inguinal regions suspicious of involvement. Remaining normal. Sigmoidoscopy was done on 13 January 2022 which was suggestive of large exophytic fungating growth in the perianal region on the left side nearly 1 cm from the anal verge, Anal sphincter tone was normal., No evidence of rectal infiltration. USG guide fnac of left inguinal node suggestive of reactive hyperplasia of the lymph node. Enbloc excision of the perianal tumour with iliac and inguinal node dissection with loop colostomy (sigmoid colon) with lumbar flap was done. Histopathology done on 25/5/2022 suggestive of T3NO verrucous carcinoma perianal region. The patient was on follow-up till 21/1/23 when he presented with the same symptoms. Cemri done on 24/3/23 suggestive of large infiltrative mass in left hemipelvis at operative bed with poor fat planes with prostate and seminal vesicles and left lateral wall of urinary bladder .left iliac node 19x12 mm and left inguinal soft tissue thickening 19x46 mm with surrounding fat stranding suggestive of deposits, communication with the distal end of the large bowel. Biopsy of post perianal flap on 28/3/2023 was suggestive of

verrucous carcinoma... Extended laparotomy with excision of the distal (rectosigmoid) stump with debulking of the residual tumour with perineal dissection was done on 31/3/23. histopathology done on 27/4/23 was suggestive of verrucous carcinoma

CEMRI was again done on 2/5/23 which was suggestive of residual anorectal stump mass with large multilocular fluid collection or necrotic mass lesion in the left lateral pelvic wall extending to the gluteal region along piriformis muscle into the deep gluteal region on the ipsilateral side and, ischioanal obturator fossa. Diffuse cellulitis in perianal and gluteal region. Cect chest and abdomen were normal . The patient was then referred to our department for further management. The case was discussed in the departmental meeting, it was decided to give chemotherapy because of advanced disease. The patient was given 3 cycles of chemotherapy cisplatin and 5 fluorouracil and is on follow-up.

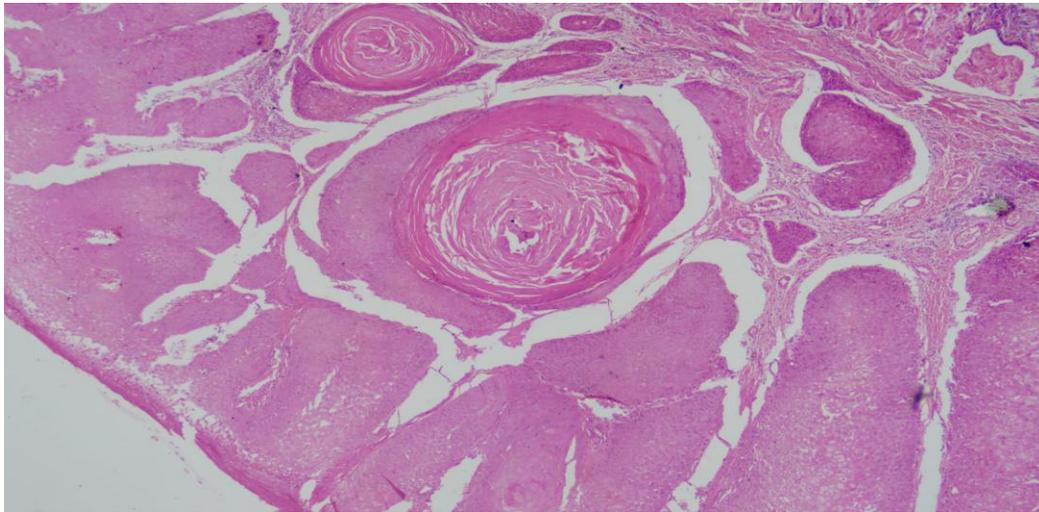


Figure 1 :- Microscopic examination cellular smears show well differentiated Squamous proliferation with prominent endophytic component having blunt projections of Squamous epithelium with deep bulbous processes ,pushing margin and keratinization.

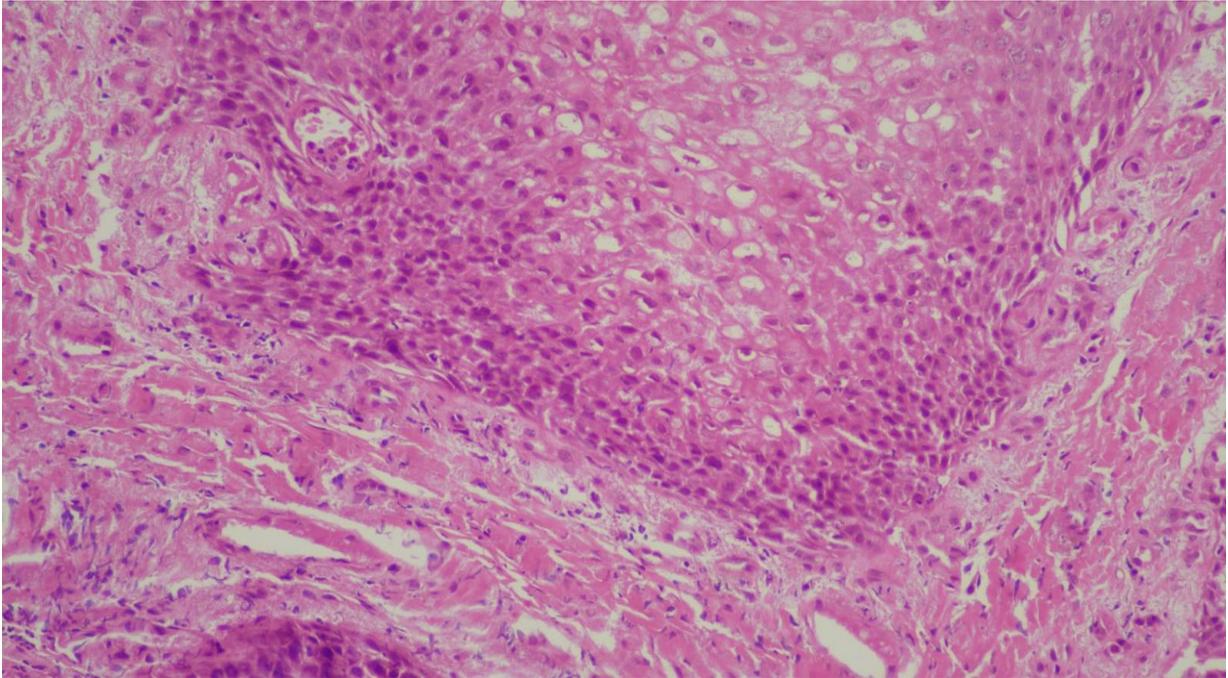


Figure 2: Microscopic examination of cell smears show large polygonal squamous cells with abundant pink cytoplasm and enlarged nuclei with minimal nuclear atypia.

### **DISCUSSION:**

Verrucous Carcinoma (VC) is a variant of squamous cell carcinoma with distinctive clinical and histologic features. Typically VC appears with an irregular and cauliflower-like appearance, but in our case growth was an infiltrative type

. Histopathologically, VC is characterized by prominent keratinization, is highly differentiated, and has a papillary and scaly shape. It tends to proliferate outward. Immuno-histologically, VC is characterized by a positive basal cell layer on Ki-67 staining [10]., while in our case tumour was well differentiated with Squamous proliferation with a prominent endophytic component having

blunt projections of Squamous epithelium with deep bulbous processes, pushing margin and keratinization.[fig 1]

For the treatment of VC, surgical resection of the tumour is preferred, and radiation therapy should be avoided due to the risk of malignant transformation [4,11,12]. A good prognosis can be expected after a local excision because the development of VC is very gradual and the occurrence of metastasis is rare. In the present case, a local recurrence occurred shortly after the first excision, thus indicating it is important to secure negative surgical margins during the tumour excision by adding intraoperative rapid pathological diagnosis; insuring full eradication of the VC and decreasing the risk of recurrence.

In this case, excision was done before admission to our department, which also sets limitations to the study. However, we believe that early recognition of VC is crucial to prevent the late effects of such tumours.

#### **CONCLUSION:**

We reported a case of VC occurring in the anus of a patient who presented with perianal swelling that recurred after the en-bloc excision of the tumour. During surgical resection, it is necessary to confirm that the margins are cleared by local excision to decrease the risk of VC recurrence.

#### **CONSENT**

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

#### **ETHICAL APPROVAL**

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

#### **REFERENCES**

1. Ackerman LV. Verrucous carcinoma of the oral cavity. *Surgery*. 1948;23(4):670-8.
2. Hoang LN, Park KJ, Soslow RA, Murali R. Squamous precursor lesions of the vulva: current classification and diagnostic challenges. *Pathology*. 2016; **48**: 291- 302.
3. Nascimento AF, Granter SR, Cviko A, Yuan L, Hecht JL, Crum CP. Vulvar acanthosis with altered differentiation: a precursor to verrucous carcinoma? *Am J Surg Pathol*. 2004; **28**: 638- 643
4. Gadducci A, De Punzio C, Fachini V, Rispoli G, Fioretti P. The therapy of verrucous carcinoma of the vulva: observation on three cases. *Eur J Gynaecol Oncol*. 1989;10(4):284-7.

5. Lever WF. Histopathology of the skin, 7th ed, Philadelphia. 1990:558
- 6 Soos Z, Varga T, Vadinszky P, Hajos P, Vajda K, Kiss S, et al. Verrucous carcinoma of the anal margin. The importance of adequate biopsy technique. *Orv Hetil.* 2011;152(9):344-8.
7. Zidar N, Langner C, Odar K, Hosnjak L, Kamarádova K, Daum O, et al. Anal verrucous carcinoma is not related to infection with human papillomaviruses and should be distinguished from giant condyloma (Buschke-Lowenstein tumour). *Histopathology.* 2017;70(6):938-45.
- 8 Elliott GB, MacDougall JA, Elliott JD: Problems of verrucose squamous carcinoma. *Ann Surg* 177: 21, 19738
- 9 S.D. Demian, F.L. Bushkin, R.A. Echevarria, Perineural invasion and anaplastic transformation of verrucous carcinoma, *Cancer* 32 (2) (1973) 395–401.
- 10 Oh K, Nishigami T, Takubo K, Shimada Y, Fujimoto J. A case of verrucous squamous cell carcinoma of the oesophagus. *Esophagus.* 2009;6(4):263-7.
11. Japaze H, Van Dinh T, Woodruff JD. Verrucous Carcinoma of the Vulva: study of 24 cases. *Obstet Gynecol.* 1982;60(4):462-6.
12. Schwartz RA. Verrucous carcinoma of the skin and mucosa.: *J Am AcadDermatol.* 1995;32(1):1-21.