

Verrucous Carcinoma of Vulva: A Report of Two Cases

Seema Mittal¹, Shipra Singla², Navjot Kaur³

ABSTRACT

Vulvar cancer occurs in less than 1% of malignancies in women. Verrucous carcinoma of vulva is a rare histological variation occurring in less than 1% of vulvar cancer cases. It is generally locally invasive and is not associated with metastasis to distant organs. Lesions present in the form of a verrucous, ulcerated, and bleeding tumor that can reach large dimensions. The differential diagnosis is condylomata, both macroscopically and microscopically.

Keywords: Carcinoma, Histological, Surgical, Treatment, Verrucous.

AMEI's Current Trends in Diagnosis & Treatment (2020): 10.5005/jp-journals-10055-0084

INTRODUCTION

Vulvar cancer is a rare lesion of the female genital tract. The risk factors for the pathogenesis of this tumor are human papilloma virus (HPV) infection, smoking, diabetes, and obesity.^{1,2} The use of oral contraceptives and vulvar cancer has not occurred primarily among older women; recent studies indicate a significant increase in the occurrence of in situ vulvar carcinomas (mainly HPV related), which usually occur in younger women.³⁻⁶

The pathogenesis is not clear yet, but recent studies postulated a role for HPV in the etiology.⁷⁻⁹ Additionally, the role of HPV infection has been confirmed by the detection of viral DNA in approximately 27% of verrucous carcinomas.¹⁰⁻¹³

Here, we present a report of two cases. The treatment decided in both was only surgical, i.e., wide local excision followed by flap transfer if needed.

CASE DESCRIPTIONS

Case 1

A 27-year-old pregnant female in her sixth months of gestation presented with chief complaint of multiple large lesions on the vulval region with pain. On examination, multiple lesions were present, largest being the ulceroproliferative growth of around 7 × 5 cm present over vulva (Fig. 1), tender, foul smelling, and patient had difficulty in sitting. Wide local excision and primary closure was done. The histopathological examination confirms verrucous carcinoma. The patient recovered well postoperatively (Fig. 2).

Case 2

A 66-year-old female presented with a large lesion on vulval region. On examination, large ulcerated, fungating lesion around 5 × 5 cm was present over vulva, discharging, nontender, and appeared to have invaded deeply (Fig. 3). Wide local excision followed by inferiorly based bilateral rotational flap was performed. The histopathological examination confirms the diagnosis as verrucous carcinoma. The patient recovered well postoperatively (Fig. 4).

DISCUSSION

Verrucous carcinoma was first described in 1945 by Ackerman who reported an uncommon variant of squamous cell carcinoma.

^{1,3}Department of Surgery, Sri Guru Ram Das Institute of Medical Sciences and Research, Amritsar, Punjab, India

²Department of Surgery, Sri Guru Ram Das Institute of Medical Sciences and Research, Amritsar, Punjab, India

Corresponding Author: Navjot Kaur, Department of Surgery, Sri Guru Ram Das Institute of Medical Sciences and Research, Amritsar, Punjab, India, Phone: +91 9501362968, e-mail: aman.as553@gmail.com

How to cite this article: Mittal S, Singla S, Kaur N. Verrucous Carcinoma of Vulva: A Report of Two Cases. AME's Curr Trends Diagn Treat 2020;4(1):44-45.

Source of support: Online access

Conflict of interest: Medical researcher

Cases most commonly involve the oral cavity as well as the skin, male and female external genitalia, cervix, bladder, esophagus, and anal canal.

Verrucous carcinoma of the vulva is a slow-growing malignancy that rarely affects lymph nodes and is presented as an exophytic growth that can be locally destructive. However, if untreated, it may reach voluminous sizes that may be mistaken



Fig. 1: Preoperative view (Case 1): Ulceroproliferative growth of around 7 × 5 cm present over vulva



Fig. 2: Postoperative view (Case 1): Wide local excision and primary closure



Fig. 3: Preoperative view (Case 2): Ulcerated, fungating lesion around 5 × 5 cm was present over vulva



Fig. 4: Postoperative view (Case 2): Wide local excision followed by inferiorly based bilateral rotational flap

for vulvar condylomata. Therefore, this tumor classification should be kept in mind whenever a patient with condyloma does not respond to topical treatment or in cases of local ulceration. Histological diagnosis is made by tumor–dermal interface with minimal stroma between the acanthotic epithelium, minimal nuclear atypia, hyperkeratotic areas on the surface of the tumor associated with low nuclear atypia, and diffuse and chronic stromal inflammation.

Treatment should prioritize surgical procedure, which will depend on lesion size and location (surgical excision, hemivulvectomy, or vulvectomy). A free surgical margin of at least 1 cm should be used in order to avoid recurrences. In cases of extensive tissue resection, grafts or flaps are needed for local reconstruction.

CONCLUSION

Verrucous carcinoma is rare variant of squamous cell carcinoma. But it should be kept in mind in a patient presenting with large vulvar lesion. The diagnosis is confirmed by histopathological

examination. Treatment is only surgical excision and closure either primary or flap/graft cover depending upon size of lesion.

REFERENCES

1. Ries LAG, Melbert D, Krapcho M, et al. SEER Cancer Statistics Review, 1975–2004. Bethesda, MD: National Cancer Institute; 2004 <http://Seer.Cancer.Gov/Csr/1975>.
2. Brinton LA, Nasca PC, Mallin K, et al. Case-control study of cancer of the vulva. *Obstet Gynecol* 1990;75(5):859–866.
3. Judson PL, Habermann EB, Baxter NN, et al. Trends in the incidence of invasive and in situ vulvar carcinoma. *Obstet Gynecol* 2006;107(5):1018–1022. DOI: 10.1097/01.AOG.0000210268.57527.a1.
4. Borge T, Dillner J, Anttila T, et al. Prospective seroepidemiological study of role of human papillomavirus in non-cervical anogenital cancers. *Br Med J* 1997;315(7109):646–649. DOI: 10.1136/bmj.315.7109.646.
5. Hildesheim A, Han CL, Brinton LA, et al. Human papillomavirus type 16 and risk of preinvasive and invasive vulvar cancer: Results from a seroepidemiological case-control study. *Obstet Gynecol* 1997;90(5):748–754. DOI: 10.1016/S0029-7844(97)00467-5.
6. Madeleine MM, Daling JR, Schwartz SM, et al. Cofactors with human papillomavirus in a population-based study of vulvar cancer. *J Natl Cancer Inst* 1997;89(20):1516–1523. DOI: 10.1093/jnci/89.20.1516.
7. Schwartz RA. Verrucous carcinoma of the skin and mucosa. *J Am Acad Dermatol* 1995;32(1):1–24. DOI: 10.1016/0190-9622(95)90177-9.
8. Majewski S, Jablonska S. Human papillomavirus-associated tumors of the skin and mucosa. *J Am Acad Dermatol* 1997;36(5):659–685. DOI: 10.1016/S0190-9622(97)80315-5.
9. Miller CS, White DK. Human papillomavirus expression in oral mucosa, premalignant conditions, and squamous cell carcinoma: A retrospective review of the literature. *Oral Surg, Oral Med, Oral Pathol, Oral Radiol, Endodon* 1996;82(1):57–68. DOI: 10.1016/S1079-2104(96)80378-7.
10. Tornes K, Bang G, Strømme Koppang H, et al. Oral verrucous carcinoma. *Int J Oral Surg* 1985;14(6):485–492. DOI: 10.1016/S0300-9785(85)80054-5.
11. Spiro RH. Verrucous carcinoma, then and now. *Am J Surg* 1998;176(5):393–397. DOI: 10.1016/S0002-9610(98)00232-3.
12. Rubio D, Moratalla E, Camarasa N, et al. Carcinoma verrucoso de vulva. *Clin Invest Gin Obst* 2006;33(6):241–243. DOI: 10.1016/S0210-573X(06)74125-9.
13. Yorganci A, Serinsoz E, Ensari A, et al. A case report of multicentric verrucous carcinoma of the female genital tract. *Gynecol Oncol* 2003;90(2):478–481. DOI: 10.1016/S0090-8258(03)00270-1.