

A RARE CASE OF HPV16 ASSOCIATED VERRUCOUS CARCINOMA OF CERVIX AND UTEROVAGINAL PROLAPSE

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ABSTRACT

Verrucous carcinoma of uterine cervix associated with uterovaginal prolapse is a rare entity. The etiology of verrucous carcinoma is uncertain. HPV profiling of cervical carcinomas may have prognostic value. A case of longstanding uterovaginal prolapsed with verrucous carcinoma is discussed accompanied with a brief review.

Key-Words: Carcinoma; Human Papilloma Virus; Prolapse; Verrucous

Introduction

There are only a handful of cases reporting occurrence of combination of verrucous carcinoma of cervix uterus and uterovaginal prolapse. 60-80% of cervical carcinomas are squamous cell carcinomas.^[1] Verrucous carcinoma is reported as a variant of squamous cell carcinoma, commonly occurring in sites such as oral cavity, skin, and larynx.^[2] Verrucous carcinoma presents as an exophytic, papillary lesion locally, aggressive albeit well differentiated. In the female genitourinary tract, it is more common in vulva than in cervix uterus.^[1] Uterine verrucous carcinomas are rare. They are commonly misdiagnosed as a viral disease, condyloma acuminata³. Human papilloma virus has a causal relationship with cervical neoplasia.^[1]

We report a case of longstanding uterovaginal prolapse with a verrucous carcinoma of the cervix, keeping in mind that it may be a useful addition to few published reports. The case was diligently followed up post treatment as well as profiled for HPV.

Case Report

A 45 year old, was evaluated for vaginal discharge of one year history and long standing prolapse since 25 years. She had normal cycles and all normal deliveries. On examination, she had 3rd degree uterine descent, cervical hypertrophy and an exophytic growth of 1cm diameter on posterior

lip of cervix. Uterus was bulky in size.

Excision biopsies from multiple sites showed sub epithelial tissues invaded by tumour cells which had large nuclei & nucleolus. Nucleus showed atypia. N\C ratio was increased. Intracellular keratin was present. A diagnosis of large cell keratinizing tumour was made. Modified Wertheim's hysterectomy was performed & tissue was sent for histopathological examination which showed squamous epithelium with frond like papillae with surface keratinization. Well circumscribed pushing margins of Ackerman could be identified (figures 1, 2, & 3). There was only sinus histiocytosis of right and left lymph node chain but no regional metastasis. A final diagnosis of verrucous carcinoma was arrived upon. Patient underwent routine post-operative care and presented for monthly follow ups with Pap's smear and haematological profile. Also PCR technique was employed to check for HPV DNA. The patient was found to be HPV 16 positive. Although verrucous carcinoma responds well to surgery, remnant disease could not be ruled out owing to positivity for HPV 16. Patient was referred to higher centre for further follow up and treatment.

Discussion

Cancer of the cervix is a leading female cancer in developing countries.^[4] Approximately 80% of Cervical cancers occur in developing countries.^[2] Standardised incidence rates of cervical cancer

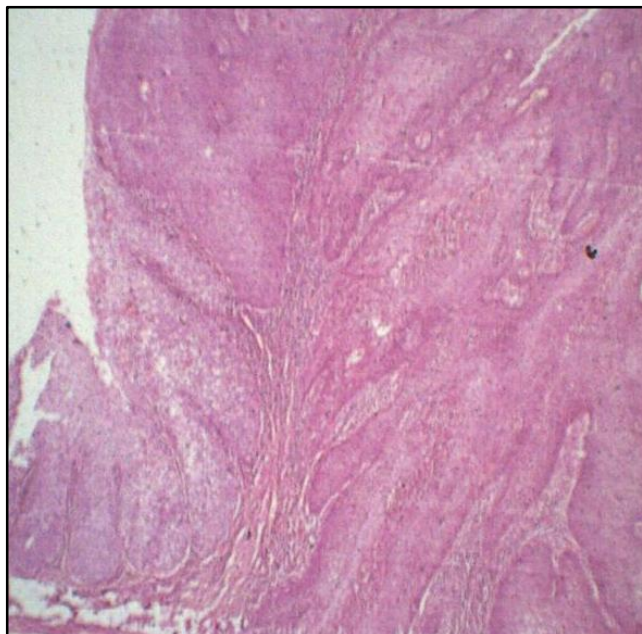


Figure-1: Marked Epithelial Proliferation with Endophytic Component without True Invasion, Pushing Margin of Ackerman Seen (10X, H & E)

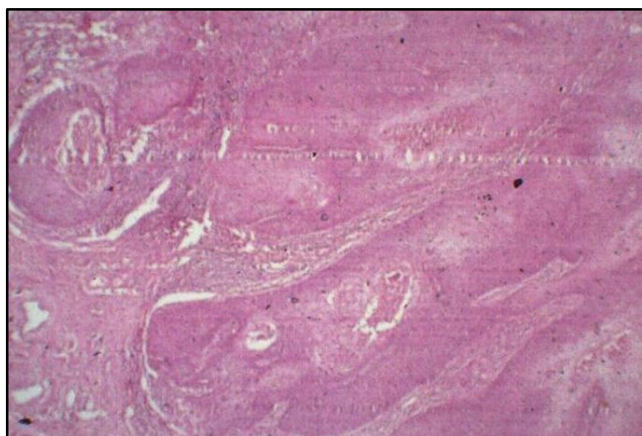


Figure-2: Bulbous Rete Ridges Showing Little Dysplastic Activity. (Well differentiated neoplastic epithelium; 10X, H & E)

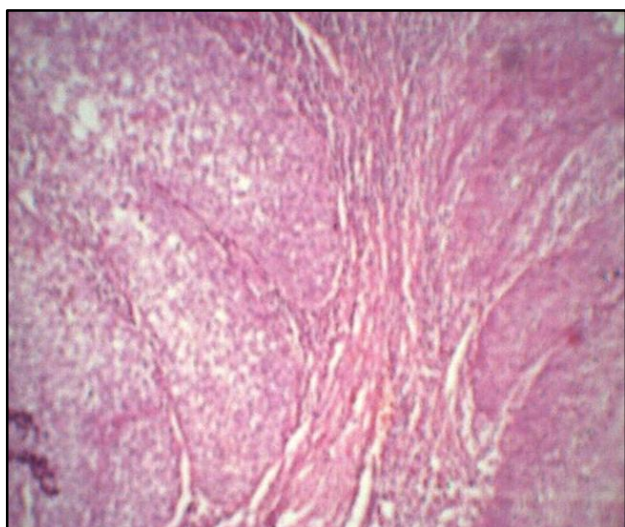


Figure-3: Koilocytes, Vacuolated Cells, Well Differentiated Neoplastic Cells (45X, H & E)

between 1983-87 for India was 47.2/100000/year.^[1] In recent years, carcinoma cervix in

association with uterine prolapse have been reported worldwide by many workers such as Benedito de silva (2002), Iavazzo (2007) and Loizzi (2009).^[5-7] Verrucous carcinoma of cervix is a rare histological variant of squamous carcinoma that represent less than 1% of cervical cancers, the commoner ones being squamous, adenosquamous and adenocarcinomas.^[2] A total of 102 case of verrucous carcinomas of female genital tract have been reported in literature (Crowther 1988).^[8] 44 cases of cervical verrucous carcinomas have been described so far (Frega 2007).^[9]

After exhaustive search in various databanks only three reports namely, Petersen 1993, Dane 2009 and Rishard 2012 have reported about concurrent cervical verrucous carcinoma and uterovaginal prolapse.^[10-12] Ours is one such unique case figuring in this elusive series. The patients of uterine verrucous carcinoma are reported to be of slightly younger than patients with VC of vagina or vulva.^[9] Our findings also are similar.

The etiology of verrucous carcinoma is uncertain. However, like in other cervical malignancies, the role of human papilloma virus is implicated in this variant too.^[13] Verrucous carcinoma is slow growing having a good prognosis after surgery.^[9] It has the characteristic feature of direct invasion locally to a greater degree than dissemination via lymph node pathway. Thus the recommended mode of treatment is surgery.^[14,15] It assumes a threatening role only in advanced stages and recurrent lesions. High grade HPV or viral persistence is a positive predictor for identifying such persistent or recurring subgroup of verrucous carcinoma.^[9] Radiotherapy fails to eradicate the lesion and may transform into a anaplastic variant.^[16]

Conclusion

Uterine cervix is a rare location for verrucous carcinoma. Because of its rarity, a differential diagnosis of condyloma acuminata as well as invasive squamous cell carcinoma should be kept in mind. Also the prognostic role of viral DNA profiling should not be underestimated. The occurrence of verrucous carcinoma and uterine prolapse is extremely rare.

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