

DOI: <https://dx.doi.org/10.18203/2320-1770.ijrcog20231251>

Case Report

Primary vaginal carcinoma in genital prolapses: a case report with review of literature

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Received: 09 March 2023

Accepted: 05 April 2023

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ABSTRACT

Primary vaginal cancer in a case of genital prolapse is a very rare malignancy. The usual age incidence is above 60 years. Likely risk factors and etiology are elderly age, smoking, low immunity, mechanical irritation and inflammation, and persistent infection with oncogenic human papillomavirus. Clinical presentation varies with the stage of the disease. Usually confused with decubitus ulcer in advanced genital prolapse. Histopathology of the biopsy specimen confirms the diagnosis. Though clinically staged imaging is required for better management and prognosis. Management modality depends on the stage, type of malignancy, comorbidity, and patient's decision. Stage, grade, type of cancer, comorbidity, and adequate management affect the prognosis. Here we present a case of primary vaginal carcinoma in a 71 year old lady with complete genital prolapse simulating decubitus ulcer. The diagnosis was confirmed with histopathology and she was treated with radiotherapy. She died in her home two months after her treatment. The aim of the presentation is (1) Statistical documentation for a rare case and (2) To create awareness of vaginal cancer in a clinically benign-looking decubitus ulcer in genital prolapse.

Keywords: Primary vaginal carcinoma, Genital prolapse, Decubitus ulcer, Prognosis

INTRODUCTION

Primary vaginal carcinoma is diagnosed on the exclusion of other genital malignancies or more than five years of disease-free interval after treatment of other genital malignancies. The incidence is very rare, constituting 1-2% of genital malignancies and 10% of vaginal malignancies.^{1,2} It is still rare in the case of uterovaginal prolapse. A systematic review article, published in 2022 reported only 27 cases.³ This rare malignancy is a significant concern with the increasing life expectancy of women. The usual age incidence is 60-70 years.⁴ Elderly age, smoking, alcohol, infection with human immunodeficiency virus, and persistent infection with oncogenic human papillomavirus are considered under risk factors and etiology.⁵ Mechanical irritation in case of genital prolapse and pessary use also has been mentioned by some authors. Clinical presentation depends on the stage of the disease. Commonly a postmenopausal lady

presents with a mass descending vagina, bleeding, and foul-smelling discharge.⁶ The common site of vaginal lesion is the upper posterior wall. It may be ulcerative or fungating which is confused with decubitus ulcer. Clinical features of malignancy and histopathological examination of tissue biopsy confirm the diagnosis. The histological variants are mainly squamous cell carcinoma in 85-90% and adenocarcinoma in 5-10% of cases which is important from therapeutic and prognostic points of view.² Staging is done by clinical assessment and magnetic resonance imaging (MRI) is important to know the exact spread of the disease.⁷ Due to the rarity of cases and may be low reporting, higher age, and comorbidity, no therapeutic protocol is yet formulated and the management of such cases is individualized. Surgery, radiotherapy, and chemotherapy are the usual modalities of treatment. Federation of obstetrics and gynecology of India (FIGO) statement on vaginal cancer says if connected to malignancy of the vulva or external os of the cervix, it is

considered as vulval or cervical malignancy respectively and treated accordingly. Prognosis depends on the stage, grade, histological type, and comorbidity. Here we present a case of primary squamous cell carcinoma of the vagina in complete genital prolapse.

CASE REPORT

A 71 year old lady reported to the gynecology outpatient department of the institution with a mass descending vagina for 10 years and foul-smelling, bloodstained discharge per vagina for one month. There was no relief with treatment from a local practitioner for a month. She got married at six years of age, had six home deliveries, and was menopausal for the last 22 years. There was no major medical or surgical history and no relevant family history. She was a nonsmoker, and nonalcoholic. No history of pessary use was there. Her bowel habit was normal and no history of hematuria or urinary retention. Her general and systemic examination was within the normal limit (WNL) except for pallor. Local examination revealed irreducible complete uterovaginal prolapse with an ulcer of 5x5 centimeters on the anterior and left lateral wall involving the middle and part of the lower third of the vagina (Figure 1).



Figure 1: Primary vaginal cancer in uterovaginal prolapse (Arrow mark pointing to external os).

The margin of the lesion was 4.0 cm. away from the external os and 1.5 cm away from the introitus anteriorly. Purulent discharge, everted and irregular margin, irregular surface, indurated base, and profuse bleeding on touch were noted. Cervix appeared healthy and flushed with the vagina; no discharge from the uterus or cervix. External ureteral meatus was healthy and no induration around it or the urethra. The uterus was grossly atrophic and felt separated from the lesion. Per rectal examination revealed

free parametrium and rectal mucosa. There was no palpable inguinal lymph node. PAP smear report was atrophic cells and no evidence of intraepithelial lesion or malignancy. Except for high blood sugar and hemoglobin of 06.0 gm%, other hematological and biochemical parameters were WNL. She was treated for diabetes mellitus and anemia. After counseling about the probability of malignancy and treatment in the oncology center, an excision biopsy was taken from the margin of the ulcer. Histopathological examination revealed squamous cell carcinoma- large cell type, probably invasive. Attendants opted for MRI and other investigations in the oncology center where she was being referred. She was treated with radiotherapy (RT) in the oncology center irregularly over a period of four months as she left the hospital frequently on request and was readmitted with pain. Her condition deteriorated at home over two months with loss of appetite, severe weakness, and disorientation. She died 06 months after her diagnosis.

DISCUSSION

Primary vaginal cancer in a case of uterovaginal prolapse is not only a very rare malignancy but rare among diseases in postmenopausal women.⁸ Our patient a 71year old lady with 22 years of menopause and a case of complete genital prolapse of 10 years developed this pathology. Excluding most of the risk factors except oncogenic HPV infection, both mechanical irritation, and inflammation might be considered as the etiology in her case. Studies have found chronic irritation in advanced genital prolapse causes ulcer which is again soiled with urine, and secondary infection adds to the progression of the pathology to malignancy.⁹ Oncogenic HPV infection might be considered in earlier age groups.¹⁰ Vaginal lesions in prolapse must be evaluated adequately before concluding it as decubitus ulcer which is usually located at the most advanced part of the prolapse. We suspected malignancy from clinical features and confirmed by histological examination. But she lost a month before reporting to specialist care. Like any malignancy earlier the management, the better is the prognosis. She did not agree to imaging, tumor markers, and cystoscopy as she was counseled for referral to an oncology center if needed. So proper assessment of the stage of the disease could not be done here. However, clinically the disease was in FIGO stage-II as neither the inguinal lymph nodes were palpable nor the lesion had spread to the pelvis but the vaginal wall was involved to full thickness forming a deep ulcer. Staging is very important to formulate treatment and predict the prognosis. Stage II disease can be managed with radical surgery followed by radiotherapy alone or with chemotherapy.⁵ Our patient, being in advanced age, diabetic and debilitated was treated with radiotherapy. Prognosis is affected by many factors. For squamous cell carcinoma of the vagina with adequate management, the 5-year survival rate is about 66% in stage I, 55% in stage II and III, and 21% in stage IV.¹¹ The patient in the discussion did not get adequate treatment and died at her home after two months of radiotherapy. The cause of her death though could not

be ascertained; might be the spread of the pathology because of improper treatment and diabetes mellitus.

CONCLUSION

Genital prolapse must be managed early not only to correct the anatomy and patient's comfort but also to avoid one of the risk factors for primary vaginal carcinoma. All vaginal ulcers in prolapse must be evaluated adequately before a diagnosis of decubitus ulcer. Awareness about the pathology among women as well as health care providers is important in referring the case to specialist care for early diagnosis and management. Reporting of such cases is required for awareness, statistical records as well as formulating therapeutic protocol for better prognosis.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

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Cite this article as: Hota BM, Sravani M, Movva N, Geetha L. Primary vaginal carcinoma in genital prolapses: a case report with review of literature. *Int J Reprod Contracept Obstet Gynecol* 2023;12:1500-2.