

## A Rare Case of Primary Vaginal Carcinoma at Unusual Site in Post-hysterectomized Woman

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### Abstract

**Introduction**– Vaginal cancer is extremely uncommon and most types of this cancer are secondary from other sites such as the cervix or uterine endometrium. Due to the rarity of this gynecological cancer, studies are limited about treatment modality and most of them have recommended pelvic and vaginal radiotherapy rather than radical surgery.

**Case Presentation** – A 65yr old post hysterectomy women with vaginal squamous cell carcinoma in the lower-portion of the vaginal wall was evaluated in this study.

**Discussion & Conclusion** – This case highlights the importance of a high index of suspicion, thorough clinical evaluation and timely histopathological confirmation in patients with persistent vaginal bleeding or mass.

**Key words**- Vaginal squamous cancer, Radiotherapy, total hysterectomy bilateral salpingoophorectomy.

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### I. INTRODUCTION

Primary vaginal cancer is a rare cancer accounting for 2-3% of all genital malignancies. Most of the vaginal cancer (84%) occur in old women (median age 63 yrs). By convention vaginal cancer accompanies cervical or vulvar cancer then it is considered primary cervical or vulvar cancer with vagina being secondarily involved. Histologically most (80%) of the vaginal Cancers are squamous cell type. Most common site of vaginal cancer is upper 1/3<sup>rd</sup> of the vagina on the posterior wall. The upper part initially lined by columnar epithelium and lower part by squamous epithelium. Later in progression lower vaginal columnar epithelium is replaced by squamous epithelium (metaplasia). Similar to cervical SCC Human papilloma virus (HPV) is the main cause of vaginal cancer therefore, high risk sexual behavior has an important role in developing vaginal cancer. The staging of vaginal cancer is clinical although various imaging are recommended for treatment planning which includes chest radiography, cystoscopy, and proctoscopy. Primary vaginal cancer may be squamous or adenocarcinoma and a very small percentage may be melanoma. The squamous subtype is more common in primary cancer although this type of tumor is diagnosed after the age of 65 yr in women. Recurrent and resistant vaginal discharge, vaginal bleeding are the most common symptoms of vaginal cancer. Vaginal cancer are squamous cell carcinomas, but other types can also occur. SCC is the most prevalent type (85-90%) of all vaginal cancer. Adenocarcinoma (10%) originates in the glands found in the vaginal lining. Clear cell adenocarcinoma, is often associated with exposure to the drug diethylstilbestrol (DES) before birth and is more common in younger women. Other types of adenocarcinoma can also occur including papillary, mucinous and adenosquamous. Melanoma which develop from melanocytes ; the cells that produce pigment are an exceptionally rare type, accounting for less than 3% of vaginal cancers & are more common in postmenopausal women. Sarcoma start in the connective tissues of the vaginal wall and includes leiomyosarcoma, rhabdomyosarcoma. Other rare types include small cell carcinoma and lymphoma.

### II. Case Report

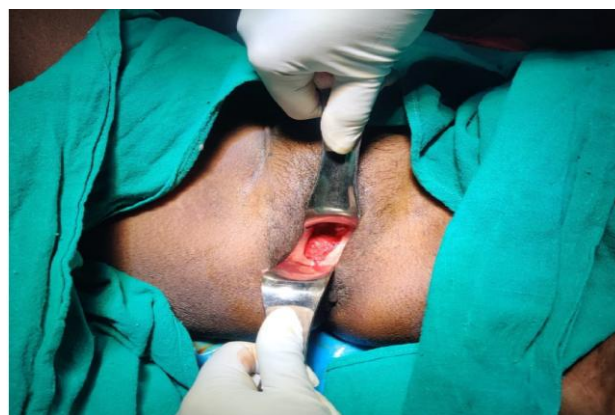
We reported a case of a 65 yr old multiparous (P3L2A0) post hysterectomized female with vaginal carcinoma. she presented to Gynecologic O.P.D on 3/2/25 with complain of 1-2 on and off episodes of vaginal bleeding since 1yr. Her obstetric history was P3L2A0 (3 FTVD) with last Delivery 30 yrs back. She had underwent total abdominal Hysterectomy with bilateral salpingoophorectomy 15 years back in view of abnormal uterine bleeding (AUB) with histopathological result depicting endometrial hyperplasia without atypia and endometrial thickness -18mm and cervix appeared bulky seen in past ultrasound scan. Two units of packed cell were transfused and the patient had an uneventful recovery period. She was asymptomatic till last 1 yr after which she developed on & off episodes of bleeding with no bowel and bladder involvement. She had no history of any significant medical/surgical illness. On admission she was malnourished, lean & thin with BMI

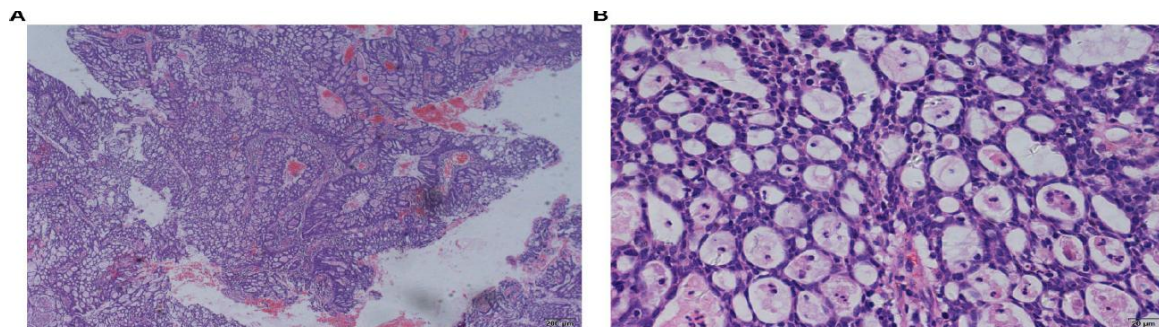
of 18 and was vitally stable. Her blood pressure was 100/60mmhg and pulse rate was 98/min. On PA examination abdomen was scaphoid and no other significant findings observed. On per speculum examination there was a 3x2cm irregular vaginal growth on middle 1/3<sup>rd</sup> of posterior vaginal wall. Bleeding was present. On PV examination a friable 3\*2 cm vaginal growth and bleed on touch was seen. On per rectal examination findings were confirmed and rectum was free. Urine and stool analysis were normal. All routine investigations were done. On MRI (February 2025)- The tumor was relatively high in signal intensity on T2 weighted images and obliterated the low signal intensity vaginal muscularis with right parametrial extension and extending caudally upto lower 1/3<sup>rd</sup> of vagina likely neoplastic etiology. Patient was taken for examination under G.A evaluation under anesthesia and biopsy from vaginal growth was taken and same was sent for histopathology examination that revealed vaginal squamous cell carcinoma. FIGO Stage 2 primary vaginal SCC was diagnosed after reviewing all of the imaging not suggestive of any metastatic disease, which is more common than primary cancer in vagina. After histopathological examination confirmation of vaginal cancer by biopsy report the patient was advised for radiotherapy and follow up for further management.

### III. Discussion & Conclusion

Vaginal cancer is extremely uncommon and most types of this cancer are secondary from other sites such as the cervix or uterine endometrium- this case highlights the importance of a high index of suspicion, thorough clinical evaluation and timely histopathological confirmation in patients with persistent vaginal bleeding or mass. Early diagnosis, accurate staging, and individualized multimodal management are essential for improving prognosis.

*a 65yr old post hysterectomy women with vaginal squamous cell carcinoma in the lower- portion of the vaginal wall was evaluated in this study.* The exact inspection and the gentle palpation of all walls of the vagina are mandatory. The turning of vaginal speculum is a critical point in gynecological examinations because a portion of the vagina may be obscured and the main lesion can be missed as well. If a specified lesion is diagnosed, a biopsy is needed, otherwise, colposcopy and pap smear test are considered for detecting microscopic disease. In MRI findings vault with involving lower 1/3<sup>rd</sup> vagina. Patient was diagnosed with FIGO Stage 2 vaginal cancer. Patient was referred to oncology department for radiation therapy and further management. Regular follow-up is crucial for monitoring recurrence and enhancing long-term survival outcomes.





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