

CASE REPORT

Rare case of advanced carcinoma vagina in young

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ABSTRACT

Diagnosis of primary vaginal carcinoma is rare because most lesions are secondary. Vaginal carcinoma is common in the post-menopausal group; however, an increasing incidence among younger women is reported, especially in HIV prevalent areas. A suspicious case should be confirmed histologically with a biopsy. Treatment should be individualised depending on the stage of the disease. Here, we are presenting a case of advanced vaginal carcinoma in a young woman.

Keywords: Vagina, squamous cell carcinoma, radiotherapy.

Carcinoma vagina is one of the rarest gynaecological malignancies and comprises 1% of cancers of the female genital system.¹⁻³ Primary vaginal carcinoma is uncommon. Secondary carcinoma of the vagina is seen more frequently⁴. Secondary or metastatic, tumour may arise from cervical, endometrial, or ovarian cancer, breast cancer, gestational trophoblastic diseases, colorectal cancer or urogenital or vulvar cancer. According to the International Federation of Gynaecology and Obstetrics (FIGO), cases should be classified as vaginal carcinoma only when the primary site of growth is in the vagina. Any growth that has involved cervix or vulva should be classified as cervical cancer and vulvar cancer respectively.

Case report

A 26 year old unmarried girl presented with complaints of irregular vaginal bleeding, on and off for the past 2 months and pain in the inner side of both thighs. She also gave history of dysuria and white discharge per vaginum since 4 months. She had attained menarche at 12 years of age and her menstrual cycles were

regular prior to this.

On examination, patient was pale. Abdominal examination did not reveal any finding. An ultrasound followed by MRI was done which revealed a well defined heterogeneously enhancing mass involving the entire vagina 7.3 x 5.2 x 7.2 cm³; extending superiorly to posterior fornix and internal os but not into cervical canal (Figure 1). Anteriorly and posteriorly fat planes were maintained between bladder and rectum, respectively. Breach in vaginal wall in posterior and left lateral aspect abutting left puborectalis muscle suggestive of paravaginal extension. Few bilateral inguinal lymph nodes were enlarged. Her blood investigations were done and found to be normal except for Hb of 8 gm/dl.

In view of the above findings, the patient was posted for examination under anaesthesia. Intraoperative findings revealed a proliferative, indurated growth involving the whole length of posterior vaginal wall upto posterior fornix, extending into left lateral fornix, just short of right lateral fornix. Cervix could not be visualised. On per rectal examination, 5 x 6 cm² hard mass was felt

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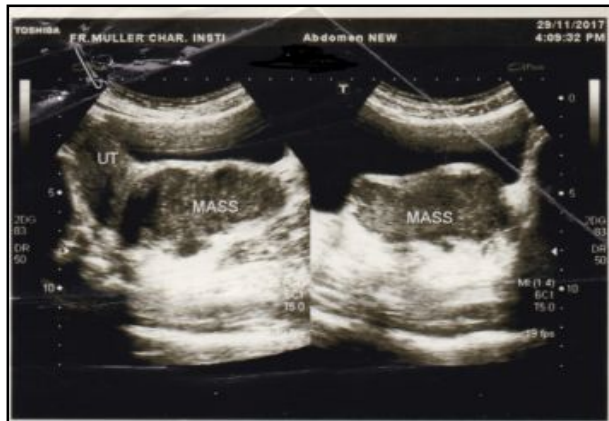


Figure 1: USG finding

involving the posterior wall of vagina and rectum was free. A biopsy was taken and sent for histopathology reporting. It was reported as squamous cell carcinoma keratinising type, grade 2 and a diagnosis of Ca vagina stage 3 was made. The patient was then referred to radiotherapy.

Discussion

Squamous cell cancer (SCC) accounts for approximately 85% of vaginal cancer cases⁵. Other tumours are clear cell adenocarcinoma, malignant melanomas, embryonal rhabdomyosarcoma and endodermal sinus tumour. Most vaginal cancers occur in postmenopausal or elderly women⁶. When occurring in younger patients, the disease seems to be etiologically related to cervical neoplasia, and thus HPV dependent⁷. The mean age at diagnosis of squamous cell carcinoma is approximately 60 years, although the disease is seen occasionally in women in their 20s and 30s. Squamous carcinoma is more common as the age of the patient increases⁸.

Vaginal cancer occurs most often in the upper third of the vagina (51%), 30% are found in the lower third, and 19% in the middle third. SCC initially spreads superficially within the vaginal wall and later invades the paravaginal tissues and the parametrium. Distant hematogenous metastases occur most commonly in the lungs, and less frequently in liver, bone, or other sites.⁵ 20% women are asymptomatic at diagnosis⁹⁻¹¹. Vaginal bleeding is the most common clinical presentation and is typically postcoital or postmenopausal. A watery, blood tinged, or malodorous vaginal discharge may also be present¹²⁻¹⁴. Mass per vagina may be noted. Some may

present with urinary symptoms (eg, frequency, dysuria, hematuria), or gastrointestinal complaints (eg, tenesmus, constipation, melena)⁽¹²⁻¹⁴⁾. 5% patients complain of pelvic pain due to extension of disease beyond the vagina. Definitive diagnosis is determined by biopsy¹⁵.

Prognosis depends primarily on the stage of disease, but survival is reduced among those older than 60 years, symptomatic at the time of diagnosis, have lesions of the middle and lower third of the vagina, or have poorly differentiated tumors. Therapeutic options depend on the stage; surgery and radiation therapy are highly effective in early stages, whereas radiation therapy is the primary treatment of more advanced stages. Chemotherapy has not been shown to be curative for advanced vaginal cancer. For stage III squamous cell carcinoma vagina treatment options include external beam radiation therapy (EBRT) alone, or in combination with interstitial, intracavitary radiation¹⁶⁻¹⁸. Rarely, surgery may be done.

Conflict of interest: None. **Disclaimer:** Nil.

References

1. Begum N, Ara I, Islam F, Ganguly S, Afroj S. Images in medical practices: primary vaginal carcinoma in prolapsed uterus. *J Bangladesh Coll Phys Surg.* 2012; 30:181-2.
2. Eifel PJ, Berek JS, Markman MA. Cancer of the cervix, vagina, and vulva. In: DeVita VT Jr, Lawrence TS, Rosenberg SA, editors. *Cancer: Principles and Practice of Oncology.* 9th ed. Philadelphia: Lippincott Williams & Wilkins; 2011. p. 1311-44.
3. American Cancer Society: *Cancer Facts and Figures 2017.* Atlanta, Ga: American Cancer Society; 2017.
4. Donato A. Vaginal carcinoma. In: Santos CER, Mello ELR, editors. *Surgical oncology handbook.* Sao Paulo: Tecmed; 2003. p 555-60.
5. Eifel P, Berek J, Markman M. Cancer of the cervix, vagina, and vulva. In: DeVita VT Jr, Hellman S, Rosenberg SA, editors. *Cancer: Principles and Practice of Oncology.* 8th ed. Philadelphia, Pa: Lippincott Williams & Wilkins; 2008. p 1496-1543.
6. Hacker NF. Vaginal Cancer. In: Berek JS, Hacker NF, editors. *Berek and Hacker's Gynecologic Oncology.* 6th ed. Philadelphia: Lippincott Williams and Wilkins; 2015. p. 608-24

7. Hellman K, Silfversward C, Nilsson B, Hellstrom AC, Frankendal B, Pettersson F. Primary carcinoma of the vagina: factors influencing the age at diagnosis. *The Radiumhemmet series 1956-96. Int J Gynecol Cancer.* 2004;14(3): 491-501.
 8. Shah CA, Goff BA, Lowe K, et al. Factors affecting risk of mortality in women with vaginal cancer. *Obstet Gynecol.* 2009; 113:1038.
 9. Underwood PB Jr, Smith RT. Carcinoma of the vagina. *JAMA.* 1971; 217: 46.
 10. Pride GL, Schultz AE, Chuprevich TW, Buchler DA. Primary invasive squamous carcinoma of the vagina. *Obstet Gynecol.* 1979; 53: 218.
 11. Gallup DG, Talledo OE, Shah KJ, Hayes C. Invasive squamous cell carcinoma of the vagina: a 14-year study. *Obstet Gynecol.* 1987; 69: 782.
 12. Choo YC, Anderson DG. Neoplasms of the vagina following cervical carcinoma. *Gynecol Oncol.* 1982; 14: 125.
 13. Herbst AL, Ulfelder H, Poskanzer DC. Adenocarcinoma of the vagina. Association of maternal stilbestrol therapy with tumor appearance in young women. *N Engl J Med.* 1971; 284: 878.
 14. Livingston RC. *Primary Carcinoma of the Vagina*, Thomas CC (Ed). Springfield: IL; 1950.
 15. Lieschen H, Miki A. Evaluation of Vaginal Cysts and Masses by 3-Dimensional Endovaginal and Endoanal Sonography. *Journal of Ultrasound in Medicine.* 2013; 32(8): 1499-507
 16. Frank SJ, Jhingran A, Levenback C, et al. Definitive radiation therapy for squamous cell carcinoma of the vagina. *Int J Radiat Oncol Biol Phys.* 2005; 62 (1): 138-47.
 17. Tran PT, Su Z, Lee P, et al. Prognostic factors for outcomes and complications for primary squamous cell carcinoma of the vagina treated with radiation. *Gynecol Oncol.* 2007; 105 (3): 641-9.
 18. Lian J, Dundas G, Carlone M, et al. Twenty-year review of radiotherapy for vaginal cancer: an institutional experience. *Gynecol Oncol.* 2008; 111 (2): 298-306.
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