CASE REPORT

Primary Vaginal Carcinoma of Lower One-Third of Posterior Vagina Associated with Third-Degree Prolapse: A Rare Case

Vijay Kumar C. R. · Bulusu Ratna

Received: 28 July 2011 / Accepted: 23 April 2012 / Published online: 12 April 2013
© Federation of Obstetric & Gynecological Societies of India 2013

Introduction

Primary vaginal carcinoma is considered as the rarest of primary gynecological neoplasm (1–2 % of all gynecological malignancies). It is commonly seen in the age group of 60–80 years [1, 2]. Most of the cases are asymptomatic and present with mass protruding per vagina. There are a few published cases of vaginal carcinoma associated with prolapse [1–5]. However, to our knowledge, there have been no published reports about posterior vaginal wall carcinoma affecting the lower one third of the vagina associated with a third-degree uterovaginal prolapse.

Case Report

An 80-year-old multiparous woman came to OPD with third-degree uterovaginal prolapse. She had presented with complaint of some mass coming out of vagina since 2 years and constipation from past 6 months. Patient had

no history of vaginal bleeding or discharge. There was no history of decreased appetite or weight loss. Local examination revealed vulval leukoplakia with third-degree uterovaginal prolapse with 2° cystocele with 2° rectocele and an exophytic lesion of 5 × 3 cm on the lower one third of posterior vaginal wall 2 cm proximal to fourchette, and well away from cervix. Ulcer was tender with indurate base, but was freely mobile over the rectocele. On bimanual examination, uterus was normal in size, mobile with free adnexae and no evidence of local spread (Fig. 1). Colposcopy was found satisfactory. Biopsy was taken from leukoplakic site of vulva and exophytic lesion of vagina. Histopathology showed well-differentiated squamous cell carcinoma and chronic vulval dystrophy (Fig. 2). Detailed work-up of patient included X-ray, and ultrasound of abdomen and pelvis, which did not reveal any metastasis. A diagnosis of stage I primary carcinoma of vagina with third-degree uterovaginal prolapse with cystocele with rectocele was made. Patient was taken up for radical colpo-vulvectomy with bilateral inguinal lymphadenectomy with vaginal hysterectomy with cystocele and rectocele repair under general anesthesia. Uterus with cervix, parametrium, and 2 cm of anterior and posterior proximal vaginal walls was removed. Postoperative period was uneventful. Histopathology confirmed squamous cell carcinoma of vagina (Fig. 3). Uterus, bilateral parametrium, and resected lymph nodes were free from tumor. She remained asymptomatic, and on per speculum examination and repeat ultrasound of abdomen and pelvis did not reveal any abnormality during follow-up.

Vijay Kumar C. R. (✉), Assistant Professor ·
Bulusu R., Professor and Head
Department of OBG, Dr B R Ambedkar Medical College,
K G Halli, Arabic College Post, Bangalore 560 048, India
e-mail: drvijaycr@gmail.com

Discussion

Primary vaginal carcinomas are rare and account for about 1–2 % of all gynecological malignancies [1]. Most vaginal tumors are secondary with primary focus in the cervix or endometrium [1]. Squamous cell carcinoma constitutes about 75–85 % of all vaginal cancers [2]. It usually involves upper one third of anterior or posterior wall of vagina. Primary vaginal carcinoma involving lower one third of the posterior vaginal wall and associated with uterovaginal prolapse is extremely rare and has not been reported in any literature till now. It is believed that continued irritation and chronic inflammation of the exposed vagina contribute to the occurrence of vaginal ca [1]. In most of the cases, it is for prolapse for which patient seeks gynecologist's advice. The diagnosis of vaginal carcinoma is usually made as a coincidence [3]. In our case, patient did not have any problem with prolapse or with the vaginal wall growth but sought gynecologist's help for chronic constipation.

We found a few case reports of combined genital prolapse and vaginal carcinoma on PUBMED [2, 4]. Early-stage vaginal carcinomas are well treated by surgery alone, and radiotherapy is recommended only for advanced stages [4]. Our patient had stage I vaginal carcinoma involving lower one-third posterior vaginal wall with third-degree uterovaginal prolapse with cystocele with rectocele. Patient underwent radial colpo-vulvectomy (procedure very similar to radial vulvectomy except that it includes resection of part of vagina as well), as tumor was close to fourchette, along with vaginal hysterectomy with cystocele and

Fig. 1 Growth arising from the lower posterior wall of the vagina as seen after reducing the UV prolapse

Fig. 2 Fungating growth with necrotic centre seen on the rectocele after lifting the UV prolapse anteriorly

Fig. 3 Histopathological picture of the growth showing round nodules with concentric, laminated layers of keratinized squamous epithelial tumor cells, called “cell nests” or “epithelial/keratinous pearls”

rectocele repair with bilateral inguinal lymphadenectomy. Patient had complete recovery, and there was no recurrence during the 6-month follow-up.

Conclusion

Thus, any vaginal lesion associated with long-standing genital prolapse needs thorough work up (including punch biopsy). Treatment is controversial and depends on the site, stage, and medical comorbidities. Current review of the literature suggests surgical treatment with/without radiotherapy as optimum treatment for early-stage, and radiotherapy for advanced-stage vaginal carcinoma associated

with genital prolapse. Early diagnosis with adequate treatment can minimize the morbidity and mortality associated with vaginal carcinoma.

References

1. Benedet JL, Bender H, Jones H III, et al. FIGO staging classifications and clinical practice guidelines in the management of gynecologic cancers. *Int J Gynaecol Obstet*. 2000;70(2):209–62. doi:[10.1016/S0020-7292\(00\)00300-3](https://doi.org/10.1016/S0020-7292(00)00300-3).
2. Donato A. Vaginal cancers. In: Santos CER, Mello ELR, editors. *Surgical oncology handbook*. São Paulo: Tecmed; 2006. p. 555–60.
3. Iavazzo C, Vorgias G, Vecchini G, et al. Vaginal carcinoma in a completely prolapsed uterus. A case report. *Arch Gynecol Obstet*. 2007;275(6):503–5. doi:[10.1007/s00404-006-0284-2](https://doi.org/10.1007/s00404-006-0284-2).
4. Tjalma WA, Monaghan JM, de Barros Lopes A, et al. The role of surgery in invasive squamous carcinoma of the vagina. *Gynecol Oncol*. 2001;81:360–5. doi:[10.1006/gyno.2001.6171](https://doi.org/10.1006/gyno.2001.6171).
5. Karateke A, Tugrul S, Yakut Y, et al. Management of a case of primary vaginal cancer with irreducible massive uterine prolapse—a case report. *Eur J Gynaecol Oncol*. 2006;27(5):528–30.