



A RARE CASE OF MINIMAL DEVIATION ADENOCARCINOMA OF CERVIX – A CASE REPORT

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ABSTRACT

Minimal deviation adenocarcinoma is a subtype of cervical adenocarcinoma and accounts for 1-3% of cervical adenocarcinoma. It is also known as adenoma malignum. We report a case of 55 year old postmenopausal women with complaints of low back pain, on examination cervix was replaced by indurated growth and was diagnosed as minimal deviation adenocarcinoma of cervix by biopsy.

KEYWORDS : cancer cervix, adenoma malignum

INTRODUCTION

Minimal deviation adenocarcinoma is a subtype of cervical adenocarcinoma and accounts for 1-3% of cervical adenocarcinoma¹. It is also known as adenoma malignum. It shows branching glandular pattern which simulates normal endocervical glands, causing delay in diagnosis. Because of its benign microscopic appearance, the term "minimal deviation adenocarcinoma" has been proposed for this tumour. It resembles benign nabothian cyst on transvaginal ultrasound. Cancer screening methods for cervix like pap smear, HPV DNA test², biopsy often misdiagnose minimal deviation adenocarcinoma of cervix. We present a case of 55 year old postmenopausal women with complaints of low back pain, on examination cervix was replaced by indurated growth and was diagnosed as minimal deviation adenocarcinoma of cervix by biopsy.

CASE REPORT

History

Mrs. X, 55 year old postmenopausal women presented to Gynaecology OPD with complaints of low back pain for 5 months and lower abdominal pain for 1 week. She did not have any complaints of postmenopausal bleeding, postcoital bleeding, abnormal vaginal discharge, loss of weight and loss of appetite. Normal bowel and bladder habits. She is a multiparous women (Para 2, Living 2), all born through normal vaginal delivery, attained menopause at 52 years of age. She is a known case of hypertension for 5 years on medication.

Clinical Examination

She was moderately built and nourished. Vitals were stable. General examination was normal. Systemic examination of CVS and RS was normal. Abdominal examination – soft, no mass felt, no visible scar. Per speculum examination showed Cervix appeared flushed with vault, indurated, bleeds on touch. Per vaginal examination showed Cervix felt hard and indurated with induration involving anterior and posterior upper 1/3rd of vagina. Per rectal examination- rectal mucosa free, parametrium felt normal. Clinically diagnosed as Stage IIA Carcinoma cervix.

Investigations

Routine blood and urine examination was normal. USG showed uterus anteverted, 8.3 X 4.8 X 5 cm, endometrial thickness 5 mm, cervix appeared normal. Pap smear done and

was unsatisfactory smear. Ectocervix biopsy showed glandular atypia. Endocervical biopsy showed minimal deviation adenocarcinoma of cervix (endometrioid variant). Immunohistochemistry estrogen receptor, progesterone receptor, vimentin were negative. PET CT showed hypermetabolic mass in the cervix and lower third of uterus with invasion of inner half of myometrium. Outer myometrium, serosal surface, parametrium appeared normal. After obtaining oncosurgeon opinion she was planned for Werthiem's hysterectomy with bilateral pelvic lymphadenectomy.

SURGERY

Intraoperative findings

Thickened cervix with right parametrial suspicious extension. Uterus appeared normal. No palpable pelvic lymph nodes. Liver and omentum normal.

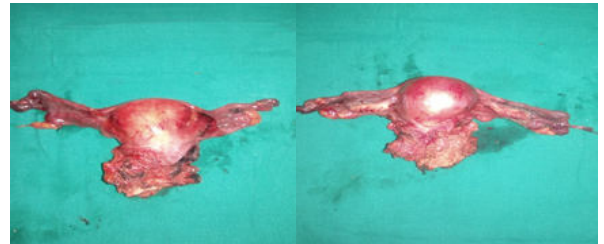


FIG-1 ANTERIOR SURFACE FIG-2 POSTERIOR SURFACE

Fig-1,2 Gross Specimen Of Uterus With Bilateral Tubes And Ovaries, Vaginal Cuff And Parametrium

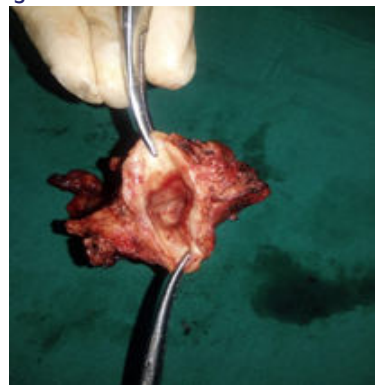


Fig-3 Specimen Showing Vaginal Cuff With Indurated Cervix



Fig-4 Cut Section

Histopathology

Shows neoplasm composed of tubular and irregular glands lined by tall columnar epithelium exhibiting mild to moderate atypia deeply infiltrating cervical stroma. Tumour extends to the isthmus, body of uterus, invades right parametrium with tumour free margin. Lymph nodes- free of tumour. Histological diagnosis-Minimal deviation adenocarcinoma of cervix(endometrioid variant)-pT2bNOMx.

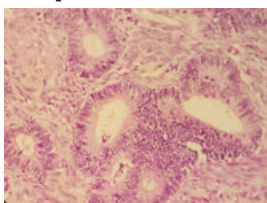


FIG-5 Increased stratification with mitotic changes

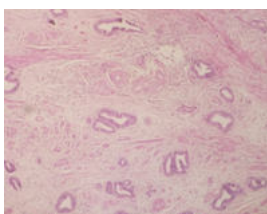


FIG-6 Blood vessels in superficial stroma

Post Operative Period

Patient had adjuvant radiotherapy. External beam radiotherapy- 25 fractions (5 days/week for 5 weeks). Brachytherapy- 3 fractions. Patient is clinically well.

DISCUSSION

Minimal deviation adenocarcinoma may originate from gastric metaplasia or Peutz- Jeghers syndrome³. Human Papilloma Virus detected very rarely in this carcinoma^{4,5,6}. While we arrived at the diagnosis with the help of cervical biopsy, studies show that neither a routine Pap smear⁷ nor a cervical biopsy would pick up the malignancy, resulting either in a missed or delayed diagnosis. In this patient, only clinical examination created a high suspicion of malignancy. USG showed no abnormalities and PET-CT played an important role in evaluating the dissemination of the disease. Research shows that preoperative imaging studies such as USG, MRI are known to be inadequate for aiding diagnosis due to benign appearance of mass⁸. Immunohistochemistry studies are a useful tool in diagnosing the primary cancer.

CONCLUSION

Early diagnosis followed by appropriate evaluation and treatment of this disease is a challenge. Surgical management for early stage disease remains the mainstay of treatment for operable cases with a very good prognosis^{1,9,10}. Postoperative adjuvant therapy is required for advanced stage of the disease, with regular follow up.

REFERENCES

1. Li G, Jiang W, Gui S, Xu C. Minimal deviation adenocarcinoma of the uterine cervix. *Int J Gynaecol Obstet*. 2010;110:89-92.
2. Naucler P, Ryd W, Törnberg S, Strand A, Wadell G, Elfgrén K, et al. Human papillomavirus and Papanicolaou tests to screen for cervical cancer. *N Engl J Med*. 2007;357:1589-1597.

3. McGowan L, Young RH, Scully RE. Peutz-Jeghers syndrome with "adenoma malignum" of the cervix. A report of two cases. *Gynecol Oncol*. 1980; 10: 125-33.
4. Xu JY, Hashi A, Kondo T, Yuminamochi T, Nara M, Hashi K, et al. Absence of human papillomavirus infection in minimal deviation adenocarcinoma and lobular endocervical glandular hyperplasia. *Int J Gynecol Pathol*. 2005; 24: 296-302.
5. An HJ, Kim KR, Kim IS, Kim DW, Park MH, Park IA, et al. Prevalence of human papillomavirus DNA in various histological subtypes of cervical adenocarcinoma: a population-based study. *Mod Pathol*. 2005;18:528-34.
6. Kusanagi Y, Kojima A, Mikami Y, Kiyokawa T, Sudo T, Yamaguchi S, et al. Absence of high-risk human papillomavirus (HPV) detection in endocervical adenocarcinoma with gastric morphology and phenotype. *Am J Pathol*. 2010; 177: 2169-75.
7. Guo F, Hu Y, Xu X, Li R, Ru T, Wang J and Zhou H: Diagnostic challenges in minimal deviation adenocarcinoma of the uterine cervix: A report of two cases and review of the literature. *Mol Clin Oncol* 1: 833-838, 2013
8. Ding DC, Chu TY, Hsu YH. Minimal deviation adenocarcinoma of the uterine cervix: A case report. *Ci Ji Yi Xue Za Zhi*. 2016;28(2):79-81.
9. Hirai Y, Takeshima N, Haga SR, et al. A clinicocytopathologic study of adenoma malignum of cervix. *Gynecol Oncol*. 1998;70:219-223.
10. Lim K-T, Lee I-H, Kim T-J, et al. Adenoma malignum of the uterine cervix: Clinicopathologic analysis of 26 cases. *Kaohsiung J Med Sci*. 2012;28:161-164.