Endometrial Intraepithelial Neoplasia in a Treated Case of Carcinoma Colon: A Case Report

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Summary

Endometrial cancer is the third most common gynaecologic malignancy in India and is an important cause of postmenopausal bleeding. Hereditary predisposition as well as simultaneous occurrence of colon cancer and endometrial cancer have been studied and reported. Thus, any patient of diagnosed colon cancer presenting with abnormal/postmenopausal vaginal bleeding should be carefully investigated. This is a case of carcinoma ascending colon who presented with postmenopausal bleeding and careful workup could detect the endometrial pathology at preinvasive stage i.e endometrial intraepithelial neoplasia.

Keywords: Endometrial carcinoma, Carcinoma colon, vaginal bleeding, salpingoopherectomy

Introduction

Endometrial cancer is the most common gynaecologic malignancy in developed world and third most common gynaecologic malignancy in developing countries like India. A very peculiar presentation of endometrial cancer is with postmenopausal bleeding which is seen in 90% of patients as a presenting symptom.[1] Endometrial cancer accounts for etiology of postmenopausal bleeding in 15% of patients.[2] Hereditary predisposition to colorectal cancer and a wide range of other malignancies (e.g., endometrial, ovarian, and gastric cancer) has been studied over years. Also, simultaneous occurrence of endometrial cancer with colorectal cancer has been reported in literature.[3] Thus, if a patient of colorectal cancer presents with abnormal vaginal bleeding, strict vigilance can help detect endometrial cancer at early/preinvasive stage. We hereby represent a case of carcinoma ascending colon with endometrial intraepithelial neoplasia.

Case

A 40-year-old female, moderately built who was illiterate and a labourer by occupation presented in the outpatient department of our hospital, the Gujarat Cancer and Research Institute, Ahmedabad in February 2019 with complaints of postmenopausal bleeding from last 15days. She had attained menopause 3 years back. She was a diagnosed case of poorly differentiated adenocarcinoma of ascending colon. She had undergone exploratory laparotomy with right hemicolectomy with ileotransverse anastomosis with double barrel stomy at a government hospital, Ahmedabad in 2016. She was then referred to our hospital for adjuvant treatment and had received 8 cycles of Capecitabine. After remaining disease free for 1 year, stoma closure surgery was done in 2017 at the same place of initial surgery. She did not have any medical comorbidity. She was a habituated tobacco chewer for 10 years. There was no significant history of cancers running in the family.

Further on evaluating the cause of postmenopausal bleeding, on ultrasonography, she was found to have 18mm thickened endometrium. Endometrial aspiration showed complex hyperplasia without atypia. Endometrial biopsy was performed which favored precursor lesion naming endometrial intraepithelial neoplasia. A preoperative computed tomography of thorax, abdomen and pelvis was performed which did not show disease elsewhere. Bilateral mammography was normal.

Patient was planned for staging laparotomy and before posting her, a clearance for surgical oncologist was sought to look for any recurrence/residual disease as well as need of any biopsy intraoperatively. A preoperative colonoscopy was advised which was normal. She was then posted for surgery with plan of intraoperative gross examination as well as frozen section examination of uterus. Peritoneal cytology was taken and total abdominal hysterectomy with bilateral salpingoophorectomy, bilateral pelvic lymph node dissection and omental sampling were performed. Uterus was cut open in OT as planned which showed thick and irregular endometrium. Frozen report demonstrated superficial Endometrial tumor/Neoplasia. No myometrial invasion was seen.

Peritoneal cytology came out to be negative for malignant cells. Final histopathology confirmed the endometrial intraepithelial neoplasia/endometrial carcinoma in situ (focally) without stromal invasion. Endometrial thickness was 1.5 cm, myometrium, cervix and both ovaries were unremarkable. Both fallopian tubes had normal histology. Omentum and bilateral pelvic lymph nodes were free of any tumor.

Discussion

Abnormal genital bleeding is often attributed to the uterus, with postmenopausal women being described as having bleeding per vaginum after atleast 1 year of stoppage of menstruation. The various etiologies behind postmenopausal bleeding can be atrophy, either of the endometrium or the vaginal mucosa, endometrial hyperplasia/carcinoma, endometrial polyps, leiomyomas and cervical pathology.[2]

Endometrial cancer holds a significant burden of gynecologic malignancy in India with 26,514 patients in the year 2020.[4] Surgery is the mainstay of treatment and early detection can reduce significant mortality with 5-year survival rates of 95% and 16% to 45% in early and late stages respectively.[2]

As the worldwide burden of endometrial cancer continues to rise, there is growing need in the early detection and prevention strategies among women at increased risk. Vaginal bleeding being a common symptom of endometrial cancer, a focused evaluation of this symptom may be a useful strategy. Universal screening has not been found to be effective hence, targeting high risk individuals and patients presenting with abnormal vaginal bleeding /postmenopausal bleeding is advocated. Thus, subjecting such patients to testing like transvaginal ultrasonography and endometrial aspiration/biopsy is advised.

Association of colorectal cancer with endometrial cancer has been a topic of research. Rare finding of synchronous detection of different types of cancer at the pelvic level should also be kept in mind. Most colorectal cancer is sporadic, and approximately 3% to 5% of all cases of colorectal cancer and approximately 2% of all cases of endometrial cancer are to be due to hereditary syndromes like Lynch syndrome.[5] Such patients may develop multiple cancers during their lifetime. The presentation of postmenopausal bleeding in a known case of colon carcinoma, should be thoroughly investigated as there are chances of finding an occult malignancy at the time of hysterectomy performed. A hysteroscopic guided endometrial biopsy should be performed, ideally by a gynecologic oncologist in such cases. In addition, the importance of communication with the pathologist is important. The pathologist should be aware that the patient has a colorectal cancer thus a potential high risk of harbouring a hereditary germline mutation and a candidate for endometrial cancer. A meticulous approach was followed in our case in properly investigating presenting signs and symptoms which could help in detecting such cancer in the preinvasive phase. Hysterectomy specimen was cut opened with careful examination of both the endometrial cavity and ovaries and was subjected to microscopic evaluation by frozen section in our case.

Conclusion

Increased awareness of endometrial cancer with colorectal cancer, timed workup of postmenopausal bleeding and accurate surgical intervention with frozen section examination could help in detecting endometrial cancer in the preinvasive phase. The patient was referred for genetic counseling. The patient is on follow-up and disease free for 48 months.

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