Case Report

Endometrioid Carcinoma Four Years After Hysterectomy: A Rare Case Report

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ABSTRACT

It is quite a fascinating case as we have recently experienced in Mugda Medical College Hospital, a tertiary level teaching hospital in Dhaka, Bangladesh, that a woman was diagnosed and treated for endometrioid adenocarcinoma four years after her vaginal hysterectomy had been done. Our patient was presented with abdominal pain for nearly 2 weeks along with nausea, vomiting and generalized weakness. Ultrasound evaluation revealed a complex pelvic mass (8.6cm × 4.9cm). Chest x-ray revealed a left sided pleural effusion, while CT scan of the abdomen revealed heterogeneously enhancing complex pelvic mass and mild ascites. After a clinical correlation with all the pathological investigations, the patient was advised for a core biopsy. Ultrasonogram guided core biopsy was done. Histopathological examination showed a malignant ovarian epithelial tumor. Then she underwent an interventional or surgical procedure, which included an exploratory laparotomy, bilateral salpingo-oophorectomy with bilateral pelvic lymph node dissection and infracolic omentectomy done under general anesthesia. The final histopathological examination of the removed mass showed an endometrioid adenocarcinoma (Grade 2). Meanwhile, she was referred for radiation therapy (both vaginal brachytherapy and external pelvic radiation) after the patient had recovered from surgery. We will discuss this case as a part of our clinical interest and continuing education for our clinicians and residents.

Keywords: *Endometrioid carcinoma, gynaecological malignancy, diagnostic laparotomy, hysterectomy, salpingo-oophorectomy*

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INTRODUCTION

Endometrial cancer (also referred to as 'corpus uterine cancer' or 'corpus cancer') is the leading cause of gynecologic cancer mortality in high-income countries and also increasing in incidence in low- and middle-income countries, with adenocarcinoma of the endometrium the most common type.[1,2] The incidence of endometrial cancer is raising among elderly women in Bangladesh, as per hysterectomy statistics in government hospitals across the country; however, there is no such data regarding incidence of endometrial cancer registered in the country.[3]

It is quite a fascinating case as we have recently experienced in Mugda Medical College Hospital, a tertiary level teaching hospital in Dhaka, Bangladesh, that a woman was diagnosed and treated for endometrioid adenocarcinoma (FIGO grade 2) four years after her vaginal hysterectomy had been done. Our patient was presented with abdominal pain for nearly 2 weeks along with nausea, vomiting and generalized weakness. We will discuss this case as a clinical interest and continuing education for our clinicians and residents.

CASE SUMMARY

A 48-year-old lady hailing from Dholpur area of Dhaka City Corporation (South) was admitted into Mugda Medical College Hospital, Dhaka, in December 2023, with complaints of abdominal pain for nearly two weeks along with nausea, vomiting and generalized weakness. She belonged to a low-

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socio-economic group. She had a vaginal hysterectomy 4 years back. She had no co-morbidities like diabetes, hypertension, or asthma. She had two grown up children with normal vaginal deliveries. She experienced menopause 6 years back. On general examination, the patient was found normotensive with bradycardia and mildly anemic. Par abdominal examination revealed a distension with irregular mass (about 6cm × 5cm) located at hypogastrium, which was mildly tender, and mobile. Overlying skin of the mass was free; however, it was fixed with the underlying structures. Par vaginal examination revealed a puckered vault (a portion) of the uterus along with a tender mass felt through vault. Ultrasound evaluation revealed a complex pelvic mass (8.6cm × 4.9cm). Her blood glucose levels were within normal limit. CA-125 was >1200 u/ml, while CA 19-9 was 20.49 u/ml. LDH was found 299 u/ml, and CEA was 2.63 ng/ml. CRP was >200. Chest x-ray revealed a left sided pleural effusion, while CT scan of the whole of the abdomen revealed heterogeneously enhancing complex pelvic mass and mild ascites. After a clinical correlation with all the pathological investigations, the patient was advised for a core biopsy. Ultrasonogram guided core biopsy was done. Histopathological examination showed a malignant ovarian epithelial tumor. Then she underwent an interventional or surgical procedure, which included an exploratory laparotomy, bilateral salpingo-oophorectomy with bilateral pelvic lymph node dissection and infracolic omentectomy done under general anesthesia. The final histopathological examination of the removed mass showed an endometrioid adenocarcinoma (FIGO grade 2). Meanwhile, she was referred for radiation therapy (both vaginal brachytherapy and external pelvic radiation) after the patient had recovered from surgery. Monthly follow-up after surgery was done for 3 months. Her last biochemical report showed – SGPT level 23 u/L and CA-125 32 u/ml, while follow-up ultrasonogram revealed normal findings.

DISCUSSION

Our patient had a history of vaginal hysterectomy due to fibroids 4 years back. However, she could not tell anything about other morbidities like endometriosis. She was admitted into the hospital with complaints of abdominal pain for nearly two weeks along with nausea, vomiting and generalized weakness. Further investigations revealed endometrioid carcinoma. In the presented case a secondary implantation of endometrial tissue during the earlier laparotomy is a possibility. The former histology report was not available though.

After the reproductive period ends, endometriosis is thought to resolve or remain in a state of inactivity. Although the hypoestrogenic state related to menopause may suggest it, postmenopausal endometriosis can affect up to 4% of women.[4] Although endometriosis is widely deemed as a benign disease, affected patients inherently have an increased risk of developing malignancy.[5,6] Therefore, recurrences or malignant transformations are rare but possible events.

Similar incidence was described by Abu et al. as a 38-year-old woman was diagnosed with endometrial adenocarcinoma arising from pelvic endometriosis thirteen years after hysterectomy with bilateral salpingo-oophorectomy, followed with hormone replacement therapy[7], while Debus & Schuhmacher reported a case of a 50-year-old woman with endometroid adenocarcinoma arising from endometriosis seventeen years after total abdominal hysterectomy and bilateral salpingo-oophorectomy followed with estrogenic hormone replacement therapy.[8] Another case was described by Al-Talib et al. as a 68-year-old woman who underwent total abdominal hysterectomy and bilateral salpingo-oophorectomy subsequently presented with left-sided pelvic mass which was later reveled as endometrioid carcinoma after 13 years of her hysterectomy.[9]

In our case, the woman underwent vaginal hysterectomy due to fibroids, as per her own description. Women often want a procedure that retains the cervix as because they want to retain as much of their reproductive system as possible and some of them believe it will preserve the sexual function.[10] However, evidence showed that total hysterectomy does not affect sexual satisfaction and libido.[10,11] Moreover, there might be chances of technical difficulties involved in removing the uterus and adnexa via the vagina and a potential high risk of cancer either developing in the cervical stump or disseminated from inadvertently morcellated uterine fragments. Hence, supracervical hysterectomy does not have clear benefits over total hysterectomy and should not be recommended as a superior technique.[12]

CONCLUSION

To summarize, although the risk of histological diagnosis of endometrial carcinoma is very low in

patients having their uterus removed previously, practitioners should always bear in mind that it may indeed occur.

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