

CASE REPORT

Metastasis of cervical carcinoma to endometrial polyp: an interesting case report

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Abstract

A metastatic focus of small circumscribed carcinoma in an endometrial polyp is extremely rare. Most of these reported cases have a primary carcinoma of the breast. We report a circumscribed metastatic squamous cell carcinoma in an endometrial polyp. This, to the best of our knowledge, is the first case report of metastasis of cervical carcinoma to a benign endometrial polyp.

Keywords: Endometrial polyp, cervical carcinoma

INTRODUCTION

Malignancy within an endometrial polyp is an unusual event. The reported incidence varies from 0.5%-4.8%.¹⁻³ Metastatic involvement of endometrial polyps is however extremely rare, primary malignant transformation being more frequent. Metastatic tumours involving endometrial polyps have been reported and predominantly originate from the breast.⁴⁻⁷ A focus of squamous cell carcinoma of cervix may rarely be present in an endometrial polyp. When present it is commonly due to direct implantation rather than metastasis.¹ This case highlights an exceptionally rare occurrence of a metastatic focus of poorly differentiated cervical carcinoma in an endometrial polyp.

CASE REPORT

A 60-year-old-female presented to the gynecology clinic with the complaints of post-menopausal bleeding and foul smelling vaginal discharge for one year. Per speculum examination revealed an irregular, gray white friable growth involving the posterior lip of the cervix. Microscopical examination of the endocervical curettage revealed poorly differentiated squamous cell carcinoma. Wertheim's hysterectomy with bilateral salphingo-oophorectomy was performed.

Pathology

Grossly, the cervix showed an irregular, gray white growth measuring 3.1 x 2.5 x 1cm. Cut surface was solid with areas of hemorrhage and necrosis. The growth was limited to the cervix and reaching 0.5 cm short of the serosa. The uterus, bilateral adnexae and vaginal flaps were grossly unremarkable. A fundal endometrial polyp 1 x 0.5 x 0.5cm was seen protruding into the endometrial cavity 4.5 cm above the internal os.

Histopathological examination of sections from the cervical lesion revealed a poorly differentiated squamous cell carcinoma deeply infiltrating the ecto and endocervical canal and showing extensive vascular embolization. The serosa, bilateral parametria and vaginal resected margins were free of tumour. Eleven lymph nodes were isolated and all showed reactive hyperplasia. No metastatic tumour deposit was seen.

The fundus showed an adenomatous polyp. The rest of the endometrium was in proliferative phase. In the center of the polyp, there were nests of malignant squamous cells with high nucleo-cytoplasmic ratio, nuclear pleomorphism and atypical mitotic figures. The morphology of these clusters was similar to that of the cervical carcinoma (Figure 1). There was no evidence of malignancy in the remaining polyp including the surface lining and at the periphery. The myometrial vessels showed tumour emboli in

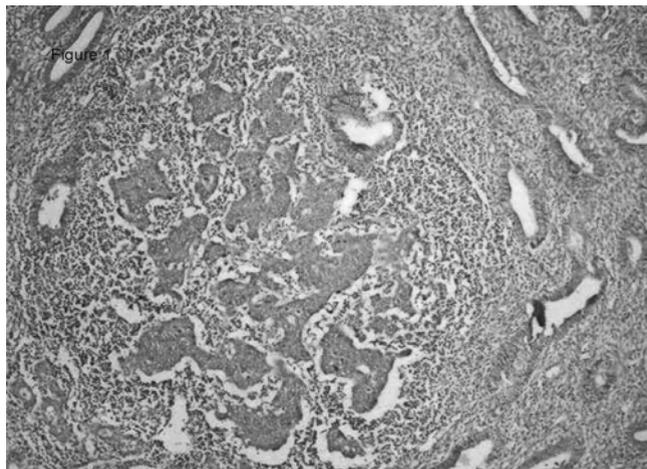


FIG. 1: Adenomatous polyp showing malignant squamous cell clusters from the cervical carcinoma.

many fields (Figure 2). Systemic examination including abdominal ultrasonography, CT chest and bone scan was negative for evidence of distant metastasis. The patient was diagnosed as having stage Ib1 cervical squamous cell carcinoma.

DISCUSSION

The incidence of malignancy in endometrial polyps has been reported to be as low as 0.5%-4.8%.¹⁻³ This includes primary malignancy,¹⁻³ direct spread from neighboring areas¹ and very rarely metastasis in a polyp.^{4-7, 9} Endometrial polyps can sometimes develop in tamoxifen treated breast cancer patients and primary endometrial malignant changes can be seen in 3-10.7% of these polyps.⁸ Some authors have

postulated that these polyps are localized areas of hyperplasia, while others have considered them to be true neoplasm.¹ The same stimuli that lead to development of endometrial polyp may ultimately progress to frank malignancy. In rare cases, the malignant process may be entirely limited to the endometrial polyp. But more commonly, carcinoma is multicentric and involves both the endometrium and the polyp. Thus, a continuous stimulus may occasionally give rise to an independent malignant focus in an already hyperplastic area such as an endometrial polyp.¹

Only few previous studies have reported an isolated focus of carcinoma in an endometrial polyp from neighbouring tissues. It is postulated that these lesions represented tumour implantation from the coexisting mural carcinoma, the

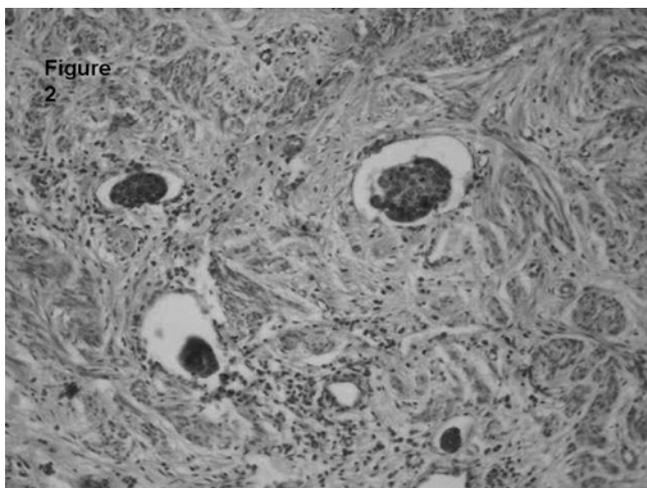


FIG. 2: Extensive vascular embolization from carcinoma cervix into myometrial vessels.

periphery of the polyp being primarily involved by the tumour.¹

In our case, this is highly unlikely, because the focus of malignancy was located in the centre of the polyp. The periphery and the surface lining of the polyp were not involved. The surrounding endometrium was histologically unremarkable and tumour emboli were seen in myometrial vessels. There was a concomitant independent carcinoma (squamous cell carcinoma of cervix). The polyp was anatomically separated from the main neoplasm. The intervening endometrium showed no evidence of malignancy. A substantial part of the polyp was free of tumour. The carcinoma within the polyp was of the same type as the cervical tumour. Above all and most importantly, the tumour showed extensive vascular embolization. All these features point against the direct spread of the tumour to the polyp.

Cases of lobular carcinoma of the breast, stomach carcinoma and melanoma have also been reported to metastasize to an endometrial polyp.^{4-7, 9}

The discovery of metastasis in the endometrial polyp was incidental because the patient was treated surgically. This however may go un-noticed in patients who are treated with radiation alone and therefore are not subjected to histopathological examination of the uterine wall.

Hence tumour focus in a benign endometrial polyp, though rare can be metastatic rather than by direct implantation or carcinogenesis in a hyperplastic endometrium. This is an intriguing situation because although the patient has a metastatic tumour deposit in an endometrial polyp and multiple vascular emboli in myometrial vessels, the clinicopathological stage remains as 1b1. We assume that the prognosis will be worsened as compared to other patients of the same stage without such metastasis, although further studies are needed to confirm this. This case also highlights the need for adequate sampling of all gross abnormalities in a hysterectomy specimen, including benign appearing endometrial polyps, in cases of carcinoma cervix to rule out metastatic foci.

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