Primary squamous cell carcinoma of endometrium: case report and literature review

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Abstract

In this paper, we report a case of primary squamous cell carcinoma of the endometrium (PSCCE) with a literature review. A 64-year-old woman, was admitted because postmenopausal bleeding. The gynecological exam found bleeding from the endocervix. The pelvic ultrasound objectified uterine regular contours, endometrial thickened was 10 mm, the presence of an intra cavitory lesion measuring 56/70 mm. The diagnostic hysteroscopy revealed a whitish appearance taking all the uterine cavity making evoke a tumor of the endometrium. Pelvic MRI showed a tumor limited to the uterine corpus endometrium (invasion by more than 50% of the myometrium) without invasion of the cervix. Radical hysterectomy, bilateral salpingo-oophorectomy, and lymph nodes dissection were performed. Grossly, the endometrial carcinoma was polypoid tumor occupying the entire uterine cavity. Histologically, the diagnosis of SCC was retained. No adenocarcinoma element was recognized. Neither squamous metaplasia nor dysplasia was recognized. No ectopic cervical tissue was found. The SCC was found to invade into deeper one half of the myometrium. No tumor cells were seen in other sites including the cervix, ovaries, parametres, and lymph nodes. The patients was FIGO 2009 stage IB (pT1B, N0), and was treated with adjuvant radiation. The patient had a disease progression in the pelvis 3 months after the irradiation. We reported a case of PSCCE which can help to enrich the literature for the treatment and prognosis of this disease.
Introduction

Pure primary endometrial squamous cell carcinoma (PESCC) are extremely rare, accounting for 1% of all malignancies of the corpus uteri. Since the first report published by Gebhard in 1892, only few cases of PESCC have been published. Here, we report a case of PESCC.

Patient and observation

A 64-year-old woman, Gravida 5 Para 5, was admitted because postmenopausal bleeding. The gynecological exam found bleeding from the endocervix, uterus had normal size without mass or laterouterine sensitivity. The pelvic ultrasound objectified uterine regular contours, measuring 103/70 mm, endometrial thickness was 10 mm, the presence of an intra cavitory vascular Doppler lesion measuring 56/70 mm. The diagnostic hysteroscopy revealed a whitish appearance taking all the uterine cavity making evoke a tumor of the endometrium. Pelvic MRI showed a tumor limited to the uterine corpus endometrium (invasion by more than 50% of the myometrium) without invasion of the cervix. Radical hysterectomy, bilateral salpingo-oophorectomy, and lymph nodes dissection were performed. Grossly, the endometrial carcinoma was polypoid tumor occupying the entire uterine cavity. Histologically, the diagnosis of SCC was retained (Figure 1). No adenocarcinoma element was recognized. Neither squamous metaplasia nor dysplasia was recognized. No ectopic cervical tissue was found. The SCC was found to invade into deeper one half of the myometrium. No tumor cells were seen in other sites including the cervix, ovaries, parametres, and lymph nodes. The patients was FIGO 200 stage IB (pT1B, N0), and was treated with adjuvant radiation. The patient had a disease progression in the pelvis 3 months after the irradiation.

Discussion

Pure primary endometrial squamous cell carcinoma (PESCC) are extremely rare, accounting for <1% of all malignancies of the corpus uteri [1]. In the literature, fewer than 100 cases were reported since the first report in 1892 by Gebhard [2]. Diagnosis of PESCC is based on Fluhmann criteria (1928). Briefly, it is mandatory to exclude: cervical carcinoma involving the endometrium, coexist endometrial adenocarcinoma, and contiguity between the endometrial cancer and the squamous cervix epithelium [3]. The etiopathogenesis of PSCCE is still unknown because of its rarity [4]. Accurate revision of the literature revealed that diverse and controversial hypotheses were suggested by some researchers to clarify causes and pathogenetic mechanisms responsible for PSCCE. In 1993, Horn and Bilek [2] suggested that this malignancy could be the result of a bidirectional differentiation of pluripotent endometrial precursor cells. In 1995, Yamamoto et al. [5] in a case report emphasized that PSCCE may arise from heterotropic cervical tissue. More recently, some authors probed to establish if PSCCE could be correlated to human papilloma virus (HPV) infection. The results of these studies are controversial, too. Some authors, in fact, did not detected HPV in cases of PSCCE by in situ hybridization and thus concluded that HPV infection may not be a carcinogenic factor in the development of this neoplasm [6]. Kataoka et al. [7] by polymerase chain reaction (PCR) instead demonstrated the presence of human papilloma virus (HPV) type 31 and the absence of mutation of tumour-suppressor gene p53.

Conclusion

Pure primary endometrial squamous cell carcinoma (PESCC) is an extremely rare malignance of the corpus uteri. Diagnosis of this rare entity is based on careful pathologic review of the hysterectomy specimen. The underlying etiology or inciting factors leading to this condition have yet to be determined. More studies are needed to address the concern about the extension of primary surgical treatment and the efficacy of adjuvant therapy in this disease.

Competing interests

The authors declare no competing interests.

Authors’ contributions

All authors read and approved the final version of the manuscript.

Figure

Figure 1: Primary squamous cell carcinoma of endometrium

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Figure 1: Primary squamous cell carcinoma of endometrium