

Primary endometrial and cervical squamous cell carcinoma in situ, a rare coexistence: case report and literature review

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Summary

Although the most common gynecologic tumor of the female genital system is endometrial adenocarcinoma, endometrial squamous cell carcinoma (ESCC) is rarely seen. The presence of ESCC is commonly known as a concomitant tumor secondary to cervical squamous cell carcinoma (SCC). However primary endometrial squamous cell carcinoma (PESCC) is a more rare tumor type. In situ carcinoma, defined as the inflammation of entire intraepithelial tissue with dysplastic cells without identifying any concomitant invasion or metastasis, is considered to be among the precancerous lesions of the female genital system. In situ squamous cell carcinoma cases, especially identified in the cervical region, can be rarely observed in the endometrial tissue. In this case report, the authors aimed to discuss a case of cervical and ESCC in situ which is reported for the first time in the literature.

Key words: In situ carcinoma; Squamous cell carcinoma; Primary endometrial squamous cell carcinoma.

Introduction

As is known, the most common malignancy of the cervix in its etiology is squamous cell carcinoma, especially considering HPV infection responsible. Dysplasias not crossing the basal membrane and involving the intraepithelial space completely are defined as in situ carcinoma [1]. Although endometrial adenocarcinoma is the most common tumor of the female genital system, endometrial squamous cell carcinoma (ESCC) is rarely identified and is commonly known to arise with the extension of cervical tumor to the endometrial tissues. In the literature, it has been described as primary endometrial squamous cell carcinoma (PESCC) and is reported to be quite rare [2]. In situ squamous cell carcinoma arising from the endometrium tissue has been reported only as case reports.

In this case report, the authors aimed to discuss a case of cervical and endometrial in situ squamous cell carcinoma that simultaneously developed in the same patient and they histopathologically showed no connection between two different tissues.

Case Report

A 64-year-old postmenopausal patient was admitted to the present clinic due to vaginal discharge and positive cervicovaginal smear result of high-grade squamous intraepithelial lesion (HSIL). As a result of biopsy samples collected from acetowhite areas of the cervix during colposcopy were reported to be in situ squamous cell carcinoma. The patient underwent total abdominal hysterectomy and bilateral salpingo-oophorectomy. The hysterectomy ma-

terial, approximately 10×7.5×5.5 cm in size and 183 grams in weight, was subjected to pathological examination. A polypoid mass with a size of 3.5×3×1.5 cm on the posterior wall, attached to an area in the fundus inside the endometrial cavity. After routine follow-up, microscopic examination of the slices taken from different areas of the uterine wall revealed atypical squamous epithelium that had developed in the form of segmental cords covering the endometrial polyp surface and in focal areas of the endometrium and the cervix that had no connection with each other. This atypical epithelium appeared as in situ carcinoma covering the entire intraepithelial layer in the cervix and endometrium, and not crossing the basal membrane (Figure 1).

The cervical epithelium was significantly thickened by atypical squamous cell proliferation with a narrow eosinophilic cytoplasm and giant hyperchromatic nucleus indicating full-thickness involvement. Endocervical crypts had gained a distended appearance with tumor cell infiltration and was partially involving comedonecrotic areas. The epithelium had significant disorganization, full-thickness nuclear atypia, and close mitotic figures reaching up to the upper layers of the epithelium. Glandular involvement areas were observed in the endocervical epithelium. Cervical and endometrial epithelial basal membranes were preserved in all areas and no invasion was observed.

Discussion

ESCC is a pathology that is seen in the postmenopausal period and can commonly be explained by the extension of the cervical squamous neoplasms to the endometrial tissue. However, PESCC is more rarely seen, and it is known that squamous metaplasia, developing in the stem cells between the endometrial glandular cells and the endometrial columnar cells, plays an important role in the etiology. Causes

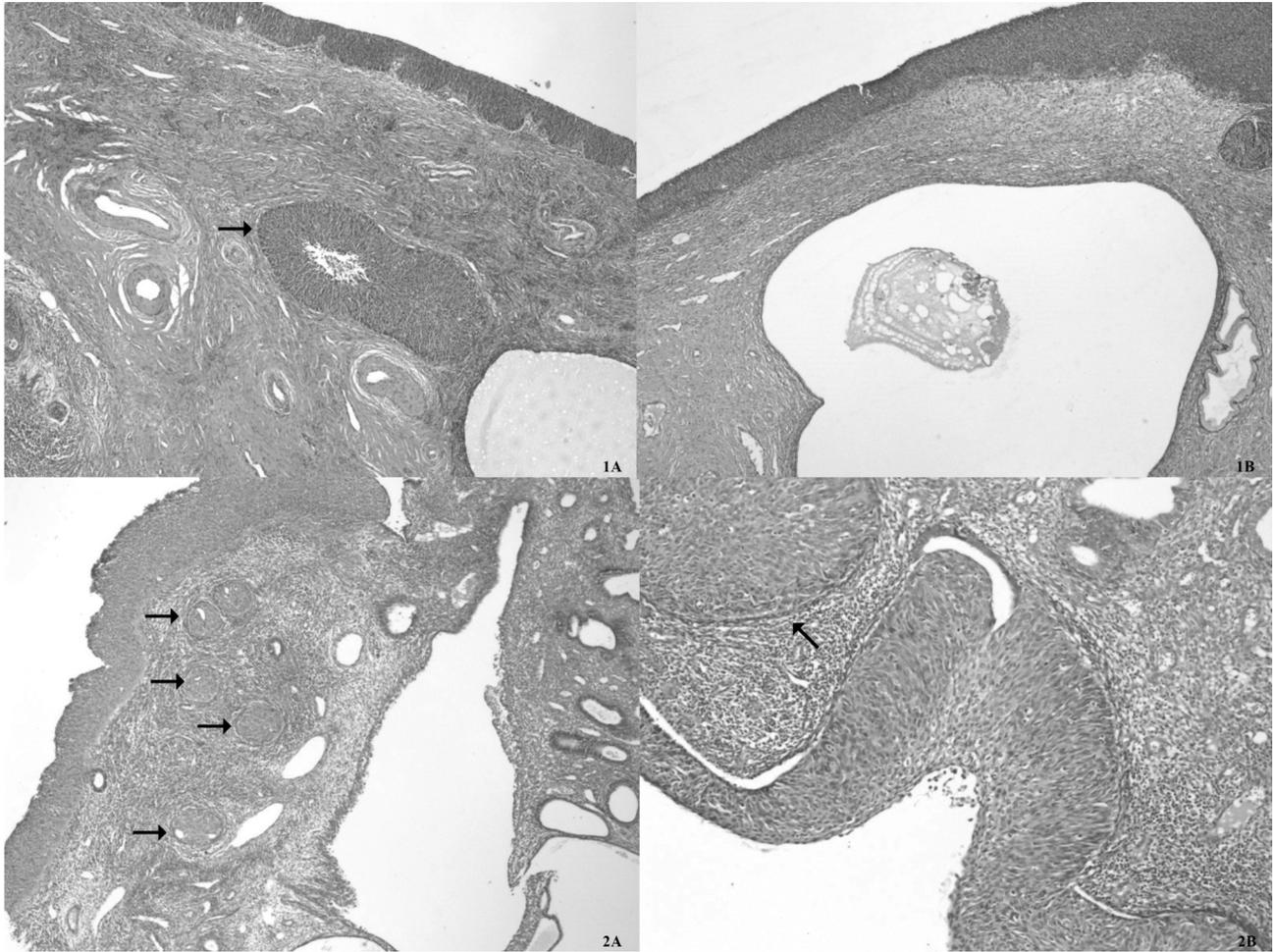


Figure 1. — Histopathological examination of the cervical and endometrial tissues. Cervical and endometrial in situ carcinoma foci are visualized in the slides. 1A-B: The area of cervical squamous cell carcinoma in situ in the cervix: Endocervical glandular involvement (arrow) (H&E, x40). 2A: The presence of polyp covered by atypical squamous epithelium, no myometrial invasion was visualized. Endocervical glandular involvement (arrow) (H&E, x40) 2B: Cervical in situ carcinoma and endocervical crypts involvement.

such as chronic endometritis, estrogen deficiency, and chronic irritation have been reported to have had a role in the development of this metaplasia. Recent studies have demonstrated the partial role of HPV infection in the development of primary endometrial squamous cell tumor [3].

While diagnosing PESCC, tumoral formation developing secondary to cervical squamous cell carcinoma and the possibilities of squamous differentiation of the endometrioid adenocarcinoma foci should be eliminated. International Fluhmann's criteria are used to make the differential diagnosis. According to these three criteria, consisting of three items: [1] there should be no evidence of coexisting endometrial adenocarcinoma or primary cervical squamous cell carcinoma, [2] there should be no connection between the endometrial squamous cell carcinoma focus and the squamous epithelium of the cervix, and [3] there

should be no connection between cervical in situ carcinoma and the endometrial tissue [4]. The present case discussed in this report involved all of the three criteria.

As a result of an average of 50 years of literature review, the authors found that a total of six patients were diagnosed with primary in situ ESCC and that these cases were discussed as separate case reports. When the characteristics of these cases were analyzed, they were all found to have been diagnosed in the postmenopausal period. It was found that two of the patients were admitted to the clinic with the complaint of pelvic pain, others with the complaints of vaginal bleeding, uterine prolapse, and discharge. In the present case, the patient was also admitted to the clinic with the complaint of vaginal discharge in the postmenopausal period.

Although there are patients diagnosed with primary in situ ESCC in the literature, this case report discussed is the

first and only case of simultaneously identified and independent cervical and endometrial in situ squamous cell carcinoma.

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