

# ENDOMETRİAL POLİPTE ATİPİK STROMAL HÜCRELER: OLGU SUNUMU

## ATYPICAL STROMAL CELLS IN AN ENDOMETRIAL POLYP: A CASE REPORT

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### ÖZET

Literatürde, kadın genital sisteminde atipik stromal hücreler özellikle vagina, vulva ve serviksi içeren alt genital sistemde başlıca da fibroepitelyal polipler üzerinde tanımlanmışlardır. Polipler endometrium epiteli ile örtülü olup değişik oranlarda gland stroma ve kan damarlarından oluşurlar. Sıklıkla kabul edilen görüş endometrial poliplerin kanser öncüsü olduğudur. Klinik olarak premenopozal dönemde menometroraji postmenopozal dönemde ise anormal uterin kanama ile semptom verirler.

Atipik hücreler özellikle endometriyumda oldukça nadir olarak rapor edilmişlerdir. Bu hücreler özellikle küçük endometriyal örneklerde malign hücreler ile karışabilir (adenosarkom, endometrial stromal sarkom ve karsinosarkom). Radikal cerrahiye önlemek için, patoloğların ve jinekoloğların kadın genital sistemindeki bu atipik hücrelerin farkında olması gerekmektedir.

**Anahtar Kelimeler:** Stromal hücreler; Uterus Hastalıkları; Polipler.

### ABSTRACT

Atypical stromal cells of the female genital tract have been already described in the literature, which are predominantly observed as a feature of fibroepithelial polyps of the lower genital system including vagina, vulva and cervix. Polyps are covered with endometrial lining and composed of varying amounts of glandular stroma and blood vessels. Endometrial polyps are usually regarded as a cancer precursor. Clinically patients with endometrial polyps apply to a hospital with menometrorrhagia in the premenopausal period and abnormal uterine bleeding in the postmenopausal period.

However these atypical cells have been rarely encountered in the endometrium. Following limited endometrial sampling these cells are frequently confused with malignant cells (adenosarcoma, endometrial stromal sarcoma and carcinosarcoma). In order to prevent radical surgery, the pathologist as well as the gynecologist need to know these atypical cells of the female genital system very well.

**Key Words:** Stromal cells; Uterine diseases; Polyps.

Geliş Tarihi: 30/06/2015

Kabul Tarihi: 10/09/2015

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## INTRODUCTION

Atypical stromal cells of the female genital tract have been already described in the literature, which are predominantly observed as a feature of fibroepithelial polyps of the lower genital system including vagina, vulva and cervix.<sup>1,2,3</sup> However these atypical cells have been rarely encountered in the endometrium. In this report an endometrial polyp with atypical stromal cells is presented and its differential diagnosis discussed.

## CASE REPORT

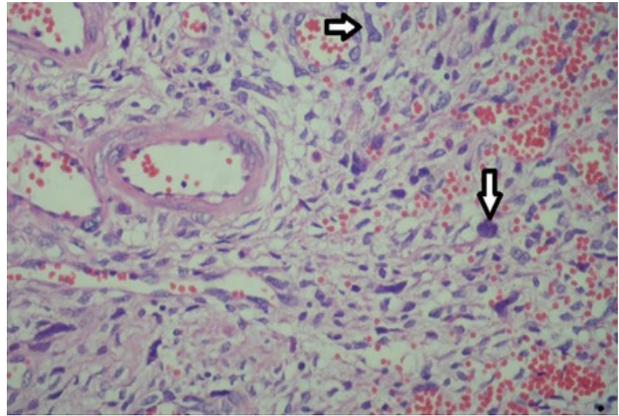
A 41 years old, third gestate and second parity patient presented with abnormal uterine bleeding (menometrorrhagia). She was perimenopausal without a history of hormonal therapy or external pelvic radiotherapy. Her menstrual bleeding usually lasts for 10 days and she occasionally had bouts of irregular bleeding. The gynecological examination of the patient was unremarkable. Her vaginal ultrasound examination revealed a 13 mm thick endometrium with an endometrial polypoid lesion; the ovaries had a normal appearance. Endometrial curettage and polyp excision have been performed for diagnosis and treatment purposes.

In our report the patient has been followed up with ultrasound examinations in a regular interval and no recurrence was observed during the 9 month-long follow-up period.

## PATHOLOGICAL FINDINGS

The microscopic evaluation of the endometrial curettage specimens has revealed endometrial tissue in the proliferative phase. The polypoid tissue, on the other hand, was hyperplastic with increased glandular involvement and atypical stromal cells in scattered fashion without an obvious increase in cellularity (Figure 1). These atypical pleomorphic cells have demonstrated an eosinophilic cytoplasm with irregularly shaped hyperchromatic nuclei. Their uniform distribution throughout the microscopic fields without forming a solitary clustering in a specific region of the polypoid stroma has been regarded as a striking feature. These atypical cells were absent in the neighbouring non-polypoid endometrial and myometrial areas. Neither mitotic figures nor heterologous elements were observed.

Stromal cellularity was not increased and the periglandular areas did not exhibit stromal hyperplasia. Cambium layer beneath the surface epithelium was inapparent and stromal overgrowth was not present. Stromal proliferation of the capillaries and hyalinization (starburst pattern) were specifically looked for but not detected.



**Figure 1** • Atypical Stromal cells in Endometrial polyps (H&E X200).

## DISCUSSION

Atypical stromal cells, which are frequently observed in the fibroepithelial polyps of the female lower genital system, are very rarely reported to be present as a feature of the endometrial polyps.<sup>1,2,3</sup> It had been described for the first time by Creagh et al. in 1995 on an endometrial hyperplastic polyp.<sup>3</sup> In a patients series of 15 cases in 2002, Tai et al. had reported the average age of the patients as 59.7 years. In this patient series 12 of the patients had been in the postmenopausal period and only five patient had revealed a history of hormone replacement therapy.<sup>1</sup> The origin of the atypical cells is controversial. In numerous studies they are suggested to be originating from fibroblasts<sup>2,5</sup> whereas in several other reports based on immunohistochemical studies their differentiation potential into both endometrial stromal and smooth muscle cells has been documented.<sup>1</sup> Presumably these cells consisted of a primitive cellular population originating from multipotent mesenchymal cells.<sup>1,6,7</sup> These atypical cells, which are observed as scattered inside the endometrial polyp, are thought to be the end result of the reactive or degenerative phenomena similar to the case with atypical leiomyoma.

The main importance of these cells is the fact that in curettage materials with limited specimen their differential diagnosis from adenosarcoma, endometrial stromal sarcoma (ESS) and carcinosarcoma has to be certainly made. Stromal cellularity, periglandular stromal clustering and the absence of polypoid projections towards the glandular lumen as well as the absence of the cambium layer below the superficial epithelium are cardinal features differentiating them from adenosarcoma. Stromal overgrowth and mitotic activity are also absent.<sup>8</sup>

In curettage materials their differentiation from ESS can be much more difficult because the diagnosis of ESS necessitates the presence of diffuse infiltration in macroscopic histologic view. ESS's are based on the proliferation of tightly packed spindle cells without a glandular component. Characteristically, proliferation of small capilleries and star-burst shaped hyalinization are observed inside of these spindle cells. On the contrary, large caliber vessels are seen in polyps. Bizarre atypical cells are extremely rare in ESS. Macroscopically, ESS's exhibit worm-like spreading into the myometrium whereas the polyps are bordered by the myometrium without any invasion.<sup>9</sup>

The third type of tumor with diagnostic difficulties is carcinosarcoma. Both epithelial and stromal components possess malignant features. The sarcomatous component may express homologous or heterologous elements. However in cases with inefficient sampling due to the limited curettage materials diagnostic difficulties may still be encountered.

In our case the distinguishing features mentioned in the differential diagnosis have been cautiously analyzed and the case has been diagnosed with "endometrial polyp having atypical stromal cells".

No recurrence has ever been encountered in the previous cases reported in the literature. In most of the cases curettage has been recognized as the appropriate treatment modality. In our report the patient has been followed up with ultrasound examinations in a regular interval and no recurrence was observed during the 9 month-long follow-up period.

The differential diagnosis of the lesions with this type of atypical cells from sarcomas is considered to be important, especially in the curettage materials. Therefore, a clinical benign endometrial polyp with atypical stromal cells has to be kept in mind during the patient evaluation process.

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