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OLGU SUNUMU / CASE REPORT

Coexistence of uterine lipoma, leiomyoma and endometrial polyp

Uterin lipoma, leiyomyoma ve endometrial polip birlikteliği

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Abstract
Lipomas of the uterus are very rare tumors, they are often misdiagnosed by preoperative radiological examination due to their content and their rarity. Although MRI is preferred because of the fat nature of the lesion, the definitive diagnosis requires histopathological examination. Although many theories have been proposed about the histogenesis of the tumor, there is still no accepted theory. These lesions may have concomitant malignancy in the uterus, ovaries, and fallopian tubes, or may have other metabolic disorders and abnormal estrogen status. Here, we report a 39-year-old female patient who was admitted to the hospital with pelvic pain and irregular vaginal bleeding. Abdominal hysterectomy and bilateral salpingo-oopherectomy was performed and histopathological examination revealed rare occurrence of coexistent uterine lipoma, leiomyoma and endometrial polyp.
Keywords: Lipoma, endometrial polyp, leiomyoma.

Öz
Uterusun lipomları çok nadir görülen tümörler olup, preoperatif radyolojik incelemeleri ile içerikleri ve nadirlikleri nedeniyle sıklıkla yanlış tanı alırlar. Her ne kadar MRG lezyonun yağ yapısından dolayı tercih edilse de kesin tanı histopatolojik inceleme gerektirir. Tümörün histogenezi hakkında birçok teori öne sürülmüş olsa da, hala kabul edilmiş bir teori yoktur. Bu lezyonlar rahim, yumurtalıklar ve fallop tüplerinde eşlik eden maligniteye sahip olabilir veya başka metabolik bozukluklara ve anormal östrojen durumuna sahip olabilir. Burada, pelvik ağrı ve düzensiz vajinal kanama ile hastaneye başvuran 39 yaşında bir kadın hastayı sunuyoruz. Abdominal histerektomi ve bilateral salpingo-ooferektomi yapılmış ve histopatolojik incelemede nadir görülen uterin lipom, leiomyom ve endometrial polip birlikteliği saptanmıştır.

Anahtar kelimeler: Lipom, endometrial polip, leiomyom.

INTRODUCTION

Benign lipomatous uterine tumors are rare. While the reported incidence of lipoleiomyoma is %0.03-0.25 [1-4], the lipomas of the uterus are remarkably rare and there were a few cases reported in the literature [5-9]. Benign lipomatous tumors of the uterus are referred to as lipoma only when they are composed of fat cells, whereas lipoleiomyoma is also known if there are also smooth muscle cells besides fat cells[10]. We reported lipoma, leiomyoma and endometrial polyp in the same patient as separate lesions. To our knowledge, this is the first case in the literature..

CASE

A 39-year-old female patient presented to our gynecology outpatient clinic because of pelvic pain and irregular vaginal bleeding. In addition, a 35x35x29 mm hypoechoic solid lesion was present in the uterine fundus. This lesion was first interpreted as compatible with leiomyoma. Contrast-enhanced magnetic resonance imaging (MRI) was recommended. MRI revealed hypertense in T1A and T2A in the right half of the uterine corpus and a non-contrast lesion, which was suppressed in fat-suppressed sequelae.

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The lesion was first interpreted as lipoma. She underwent hysterosalpingo-oopherectomy and was sent to the pathology laboratory for histopathological examination. When the uterine cavity was examined macroscopically, a polypoid lesion with a size of 70x15x5 mm was observed. Also in fundus-corpus, intramural located, a 42x27 mm sized lesion with a smooth border and a yellowish colored lesion was observed (Figure 1). In serial sections, there was also a 25 mm diameter leiomyoma nodule located intramurally in the corpus.

Microscopically, polypoid lesion was composed of thin-walled vessel sections with mild edematous fibrocollagen stroma and angulated endometrial gland structures, some of which have proliferative epithelium. Endometrial polyp was diagnosed with present. Histopathological examination of the lesion located in the uterine corpus was a benign tumor consisting of the fascicular pattern of smooth muscle fibers and the diagnosis of leiomyoma was made. In the microscopic examination of the lesion located in the fundus-corpus of the uterus, a tumoral lesion composed of mature adipocytes intervened by thin fibrous septa in the periphery of the lesion, surrounded by a fibrous capsule, was observed. It was diagnosed as lipoma (Figure 2).

Figure 1. Macroscopically endometrial polyp and uterine lipoma

Vimentin, SMA, Desmin, S-100, Ki67 were administered as immunohistochemical examination. Lipoma and leiomyomyoma were diffuse positive with vimentin. SMA and desmin were positive for smooth muscle cells in leiomyoma, however negative in lipoma. The S-100 was positive for adipocytes in lipoma, however negative in leiyomyoma. Ki 67 was below 1% in both lesions. As a result, the patient was diagnosed with intramural lipoma, leiomyoma and endometrial polyp.

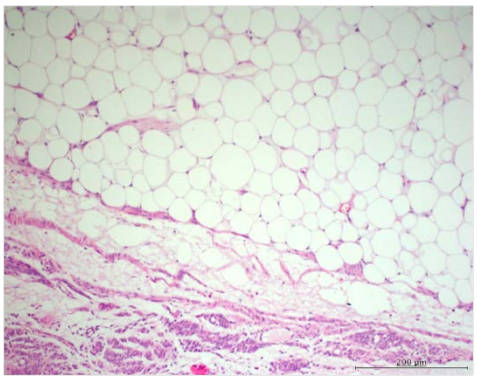

Figure 2. Lipoma (H&E, x100)

DISCUSSION

Uterine lipomatous tumors are rare neoplasms. Only tumors composed of mature fat cells are called pure lipomas; tumors that contain a mixture of mature adipose tissue, smooth muscles, vascular structures, fibrous tissue and other connective tissue elements are known as lipoleiomyoma, angiomyolipoma, and fibromolipoma[11]. Most lipomas are seen in postmenopausal women [12]. Pure uterine lipoma may be asymptomatic or may have symptoms similar to leiomyoma, such as vaginal bleeding or pelvic pain [13]. Preoperative uterine lipomatous tumors are difficult to diagnose and should be confirmed by postoperative histopathological examination6. In radiological diagnosis, USG and computed tomography (CT) findings may be nonspecific; MRI may be useful in determining the fat structure of the lesion. Although MRI is preferred for final diagnosis, most of these lesions are diagnosed by postoperative histopathological examination [14].

Lipoleiomyomas were previously referred to as fatty metamorphosis, lipomatous degeneration, hamartoma and adipose metaplasia. Now it is seen as a true neoplasm. Histogenesis of these tumors has been the subject of speculation and still preserves the mystery [15]. Lipoblastic differentiation of misplaced embryonic clusters, pluripotent cell migration along the uterine nerve and veins, and metaplastic changes of stromal or smooth muscle cells to fat cells are the mechanisms proposed to explain histogenenzis [5,6,11].

Immunohistochemistry (IHC) studies have been used by some researchers to understand histogenesis. Mignogna et al. reported the immunoreactivity of fat cells with vimentin, desmin and SMA, supporting the hypothesis of direct transformation of smooth

muscle cells into fat cells. However, Akyıldız et al. reported a case of pure uterine lipoma in which fat cells were positive for S-100 and negative for SMA[15].

These lesions may accompany concomitant malignancy in the uterus, ovaries, and fallopian tubes, or may have other metabolic disorders and abnormal estrogen status [15]. Several studies have reported simultaneous gynecological malignancy [16,17]. Due to complex histogenesis, gynecologic malignancies and metabolic disorders, uterine lipomatous tumors require detailed clinical and pathological evaluation and follow-up. Uterine lipomatous tumors need more investigation.

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