A Case Report: Uterine Lipoleiomyoma

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ÖZET

Uterine lipoleiomyomas are rare benign tumors which are often misdiagnosed on ultrasound; therefore they are leading to unnecessary invasive procedures. In clinical practice, it is important to discriminate lipoleiomyoma from a liposarcoma. According to the literature there are a lot of cases of lipoleiomyoma diagnosed preoperatively as a well-differentiated liposarcoma. While liposarcomas must be operated, asymptomatic lipoleiomyomas can be followed clinically and radiologically. Thus it is important to diagnose accurately the patients before they are exposed to the surgery. We present a rare case of lipoleiomyoma that arose in the submucosal area of uterine fundus together with endometrial polyp and this patient’s clinical findings, diagnosis and treatment principles are discussed in the current literature.

Key words: Uterine lipoleiomyoma; Myoma; Lipomyosarcoma
INTRODUCTION

Uterine lipoleiomyomas are rare benign tumors which are often misdiagnosed on ultrasound; therefore they are leading to unnecessary invasive procedures (1, 2). The incidence of uterine lipoleiomyomas varies from 0.03% to 0.2% (3). The majority of lipoleiomyomas are in the uterine corpus 90.7%, but some are found in the cervix 6.5%. They can be located respectively in intramural, subserosal and submucosal (77%, 11%, 2,5%) (4). They are typically found in postmenopausal women and they are usually combined with leiomyomas (5).

Histologically, uterine fatty tumors include a spectrum including pure lipomas, lipoleiomyomas and fibrolipomyomas. Lipoleiomyoma is a very unusual lesion of the uterus. It occurs primarily in obese perimenopausal and post menopausal patients. The tumor consists of long intersecting bundles of bland, smooth muscle cells mixed with nests of mature fat cells and fibrous tissue (6).

We present a rare case of lipoleiomyoma that arose in the submucosal area of uterine fundus together with endometrial polyp.

CASE REPORT

A 56-year-old postmenopausal woman came for annual routine inspection. She experienced menopause at the age of 51 and was not on any hormone replacement therapy. She had no complaint about herself. She had no disease and took no drug. Her body mass index was 27. Her obstetric and gynaecological history was normal.

Gynecological examination revealed no abnormalities of the vulva, cylindrical vaginal portion of the cervix and no evident pathological change was detectable with clinical examination.

Findings of preoperative ultrasound examination showed uterus with thickened endometrium of 7 mm and hyperechoic mass suggestive of myoma of anterior wall of fundus of uterus (Figure1), measuring 22mm in diameter. In addition, there was a millimeter focal calcification of 5mm in diameter in the submucosal region of fundus. Ovaries and fallopian tubes were normal in appearance.

Figure 1: Ultrasound

She has undergone dilatation and curettage (D&C). Histologic study revealed atrophic endometrium. Papnicolau (PAP) smear, no abnormality was observed.

All the standard serological and hematological parameters were within normal range. The patient underwent total abdominal hysterectomy with bilateral salpingooophorectomy because of polyp and fear of malignancy. There were two patients with cancer of endometrium in her family.

On gross examination of the specimen, the cervix and corpus measured 3x2 cm and 4x5 cm respectively. Endometrial thickness was 5mm. There was one myoma in the fundus. The cut surface of myoma is rich in adipose tissue. Also, in the submucosal area of fundus one polyp was seen 15mm size. The serosal surfaces of the uterus were normal. Cut section of ovaries and the fallopian tubes appeared grossly normal.

A histopathological examination revealed a uterine lipoleiomyoma, composed of variable amounts of smooth muscle cells and mature adipocytes (figure2).

To confirm the diagnosis of the tumours, the tissue sections were stained with h-caldesmon (figure3) and alpha-smooth muscle actin (figure4), which yielded a positive reaction.
DISCUSSION

Lipoleiomyoma is a very rare benign mesenchymal tumor which contains adipose tissue and smooth muscle (7). So there is little information in the literature on their clinical importance and treatment options. It is known as hypothetical that lipoleiomyomas result from fatty metamorphosis of uterine smooth muscle cells which may proceed to form localized or diffuse mature adipocyte tissue in leiomyoma or in the myometrium rather than fatty degeneration (8). Estrogenic manifestations may be an important factor in the development of lipoleiomyomas (4). In addition some rare cytogenetic studies showed that there were lots of clonally chromosomes such tumors and in the lipomas translocation of t[12-14] might be seen. Therefore cells developing from multipotent stem cells in the myometrium of uterus may create lipoleiomyomas (9). Lipomatous lesions are classified microscopically depending on amount of fat and other tissue component. If they consist of pure mature fat cells, they are entitled as lipoma. If they consist of connective tissue and smooth muscle bundles and fat cells, they entitled as lipoleiomyomas. When lipoleiomyomas contain proliferating vessels, they are denominated as angiomyolipoma (9-11). According to previous studies, lipoleiomyomas most commonly grows in the uterine corpus at the subserosal or intramural levels, on the other hand it has been reported at other sites, including the cervix as well as in intraligamentary, peritoneal, and ovarian areas (12).

The Clinical symptoms of lipoleiomyomas are like uterine leiomyomas. The majority of patients are asymptomatic. The others present such as pelvic pain, abnormal uterine bleeding, constipation, and increased urinary frequency associated with the size of the lesion (3, 5, 13).

According to previous studies we know that lipoleiomyomas look like clinically myomas, but radiologically liposarcomas (14, 15). In clinical practice, discrimination of lipoleiomyoma from a well differentiated liposarcoma is importance. According to the literature there have been a lot of cases of lipoleiomyomas which were diagnosed preoperatively as a well-differentiated liposarcoma (12, 15). While liposarcomas must be operated, asymptomatic lipoleiomyomas can be followed clinically and radiologically. Thus it is important to diagnose accurately the patients before they are exposed to the surgery (16, 17). In the literature there has been only one liposarcoma case that developing from lipoleiomyoma, which showed that lipoleiomyomas
are benign tumors of the uterus which do not cause to
death (18). In order to confirm the diagnosis we must
examine pathologically although imaging plays an im-
portant role in preoperative diagnosis and localization
of the lipoleiomyoma.

Providing that we increase awareness of the tumor and
its features on imaging techniques, it may support fu-
ture preoperative diagnosis.

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