

# Primary Pure Uterine Lipoma: A Report of Two Cases and Review of the Literature

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### ABSTRACT:

Primary pure uterine lipoma: a report of two cases and review of the literature

**Objective:** Pure uterine lipomas are rare diagnoses despite the lipoma itself being a common entity. The histogenesis of these lesions is still unknown. Clinical symptoms are similar to uterine leiomyomas.

**Conclusion:** In this report two cases with uterine lipomas were presented with their histopathologic and clinical aspects.

**Keywords:** Lipoma, soft tissue tumor, uterine neoplasm

### ÖZET:

Primer pür uterin lipom: Literatür eşliğinde iki olgu sunumu

**Amaç:** Lipom sık gelişen bir antite olsa da uterus yerleşimli lipomlar son derece nadir görülen yumuşak doku tümörleridir. Literatürde az sayıda bildirilen uterus lipomlarının histogenezi hala tam olarak net değildir. Klinik semptomlar leiomyomlara benzerdir.

**Sonuç:** Bu çalışmada uterus lipomu tanılı iki olgu klinik ve histopatolojik bulguları ile sunulmuştur.

**Anahtar kelimeler:** Lipom, yumuşak doku tümörü, uterin neoplazi

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## INTRODUCTION

Pure lipoma of the uterus is an uncommon entity and only few cases are reported in the literature. The histogenesis of these lesions is still unknown. The neoplasms commonly occur in 20-40% of women beyond the age of 30 years and more frequently affect postmenopausal women. Clinical symptoms and physical signs are similar with those found in the most common uterine lesions, leiomyomas. The diagnosis can be easily made at the time of surgery or at autopsy. On the other hand, they may lead to many problems in the differential diagnosis with another uterine tumors. Recent papers suggest the possibility of a preoperative diagnosis made by computed tomography and magnetic resonance imaging.

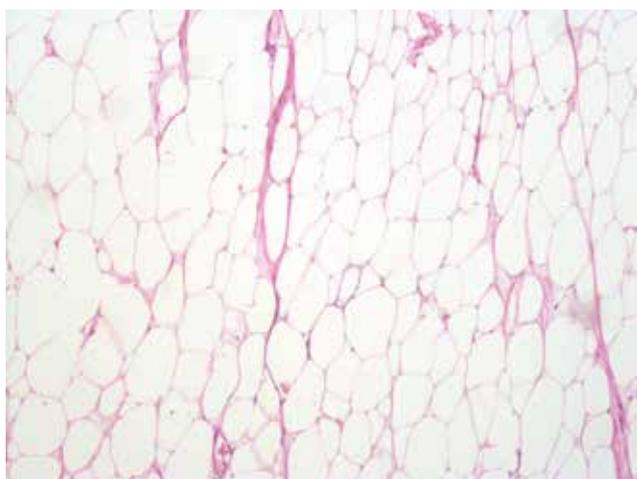
## CASE REPORTS

### Case 1

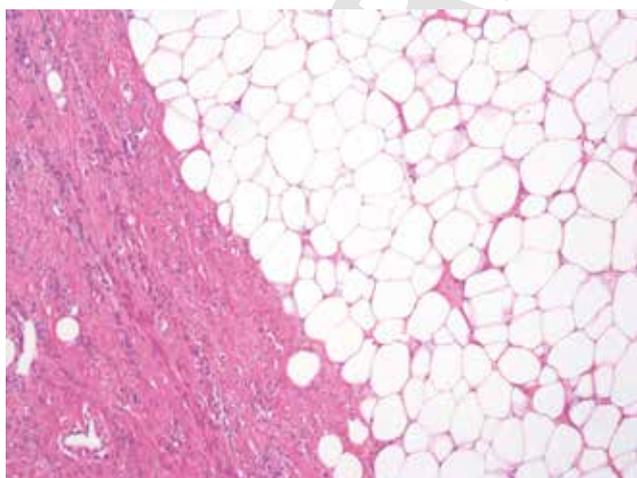
A 64 year-old-woman presented with abdominal pain. Transabdominal ultrasonography revealed an uterine mass of 3 cm diameter consistent with a intramural leiomyomatous lesion. Total abdominal hysterectomy and bilateral salphingoopherectomy has been performed. On gross examination, a 3 cm well-circumscribed intramural lesion with a cut surface of adipose tissue-like appearance has been observed (Figure-1). On histopathological evaluation, uniform cytoplasmic vacuoles confirmed the diagnosis of the uterin lipoma (Figure-2, Figure-3).



**Figure-1:** Well-circumscribed, yellowish intrauterine mass lesion (Intramural lipoma).



**Figure-2:** Mature adipocytes including uniform cytoplasmic vacuoles, H&E, X10



**Figure-3:** Adipocytes and smooth muscle fibers, H&E, X10

## Case 2

A 56 year-old-woman with a complaint of abdominal pain registered to the gynecology department. Transabdominal ultrasonography suspected an incidental leiomyoma. Total abdominal hysterectomy and bilateral salpingo-oophorectomy was carried out and a 8.5 cm-well-circumscribed, yellowish, lipomatous lesion, filling the uterine cavity has been observed. Histopathologically, the lesion showed similar morphology with the other case and diagnosed as an uterine lipom.

## DISCUSSION

Lipomatous uterine tumors, especially pure lipomas, are very rare benign neoplasms (1). Their incidence has been reported between 0.03% and 0.2% (2,4). In the current study, 2 cases of uterine lipomas were presented. Mixed types (lipoleiomyoma, angiomyolipoma, fibrolipoma) are seen more commonly in contrast to pure lipomatous tumors (2,3). In our study, no components other than lipoma were seen. Uterine lipoleiomyoma is generally the most common type of uterine lipomatous tumors and the majority seen in postmenopausal age group (2,5). In the current case report, According to Willen et. al. pure lipoma is the proper diagnosis for the cases with a tumor consisting of adipocytes and peripherally displaced smooth muscle cells (6).

Despite some theories have been mentioned in some previous reports such as misplaced embryonic fat cells, perivascular extension of peritoneal/retroperitoneal fat, lipocytic differentiation of primitive connective or mesenchymal tissue and adipocytic metaplasia of smooth muscle or connective tissue cells (3,7,8), the pathogenesis of the lesion is still unknown (5).

Histologically, pure uterine lipomas compose of mature adipose cells with no invasion of the surrounding myometrium (9,10). In our two cases, similar morphology was observed. When a large uterine tumor occurs in a postmenopausal woman, the possibility of malignancy should always be considered. Thus, to rule out liposarcoma, a final pathological examination is required (10).

Preoperative imaging techniques bare an critical importance to differentiate an uterine lipomatous tumor from other uterine lesions such as leiomyoma and several adnexial tumors (10). Preoperative diagnosis can be made to avoid unnecessary surgery by these current imaging modalities. MRI is the best tool for diagnosing a pelvic fatty tumor, such that the correct preoperative diagnosis can circumvent unnecessary surgery in an asymptomatic patient (10). In our cases, preoperative investigation could not differentiate the lipomatous entities from other

uterine lesions, further pathological examination became essential. Histopathological and immunohistochemical in the differential diagnosis of lipomas from other possible malignant neoplasms. In the current cases, histopathological examination was performed and established the diagnosis as pure uterin lipomas.

In conclusion, uterine lipomas have an excellent prognosis and can be considered for the differential diagnosis of uterine mass in postmenopausal women.

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