Giant lipoleiomyoma of the Uterine Corpus: a case report in patients with multiple sclerosis


Introduction

Uterine leiomyoma is the most common benign pathology in women and lipoleiomyoma is an extremely rare and specific type of leiomyoma with an incidence ranging between 0.03% and 0.2%. Lipomatous tumors of the uterus are rare neoplasms which can be divided into three broad groups - pure, mixed, and the exceedingly rare malignant liposarcoma. Lipoleiomyoma is a rare benign variant of uterine leiomyoma, composed of an intimate admixture of mature smooth muscle cells and adipocytes, often with the former element predominant, most commonly found in the uterine corpus. They probably represent tumor metaplasia within a leiomyoma. However, some studies show monoclonality, and lipoleiomyoma is now regarded as a distinctive true neoplasm. Therefore, its pathogenesis and clinical significance remain to be clarified. Regardless of its origin, lipoleiomyomas have been consistently considered benign. These tumors are usually seen in obese postmenopausal women and are usually asymptomatic but may also present with typical leiomyoma symptoms. The most common site of occurrence is the uterine corpus. Imaging plays an important role with magnetic resonance imaging being the modality of choice as it delineates the fat component better. The pathogenesis of this lesion is poorly understood. Histology shows a characteristic pattern with an encapsulated lesion with an admixture of smooth muscle cells, lobules of adipocytes and fibrous tissue. Prognosis is excellent. We report a case of lipoleiomyoma in an obese postmenopausal woman, with multiple sclerosis, who presented with abdominal discomfort.

Case

A 54-year-old postmenopausal, obese, multiparous woman was admitted to our hospital with complaints of lower abdominal pain and abdominal distension for the last 18 months. On detailed anamnesis, the patient had noticed a mass in her abdomen for 6 months and a gradually increasing pain with easy tiredness. She had four previous vaginal deliveries and an abdominal surgical operation for appendectomy. Her medical history was remarkable for 8 years of gastritis, 10 years of multiple sclerosis, and had no history for family member with genital malignancy. On physical examination, her vital signs were normal and abdominal palpation revealed a distended abdomen with palpable hard, solid mass filling whole abdominal cavity which cannot be lateralized. No abdominal rebound or tenderness was observed. The speculum examination showed a normal uterine cervix and vagina but fornices were full on pelvic examination. Initially, a transvaginal ultrasound was applied and showed a large, solid, and complex mass in pelvic cavity which extended to sub-diaphragmatic area. An MRI scan of abdomen showed that a large solid mass with somewhere in cystic and fatty content, approximately 18x20 cm in size in the coronal plane. (Figure 1). Laboratory examinations for whole blood count, liver function tests, coagulation parameters, urea, creatinine, and serum electrolytes were in normal limits. The serum level of CEA, CA19.9, CA 125 and CA 15.3 were in normal limits too. So in the light of these clinical findings from ultrasound, MRI examinations and laboratory findings, we planned surgery for the patient. A midline navel-pubic vertical incision was made. At laparotomy, on inspection, a giant uterine solid mass, occupying the pelvis and abdomen until epigastrium, was noted. Total abdominal hysterectomy and bilateral salpingooophorectomy were carried out (Figure 2).

A drain was put into the pelvis and the surgery was completed. The drain was removed in second postoperative day and the patient was discharged 4 days after the operation with no complication. Macroscopically, pathologic examination revealed a uterus by the deformed shape of 24x23x13 cm, which opening is filled by neo-formation of lipomatous appearance with whitish areas. Microscopic examination showed lipoleiomyoma of uterus with extensive cystic and fatty content as admixed with mature adipocytes without histologic signs of malignancy (Figure 3). Both ovaries and endometrial cytology were detected to be benign.

Discussion

Leiomyomas can be easily diagnosed on imaging in cases of typical appearances but degenerative changes or fatty content like in lipoleiomyoma may lead to change in its images and can cause difficulty and confusion in diagnosis. Leiomyomas have been misdiagnosed as adenomyosis, hematometra, uterine sarcoma, and ovarian masses and also differential diagnosis of lipoleiomyoma includes angiolipoma, angiomylipoma, atypical lipoma, and liposarcoma. The surgery is most frequently preferred for treatment of giant leiomyomas. The surgical approach of these giant tumors concerns some intraoperative technical difficulty such as the increase of blood loss, any injury to adjacent organs due to dense intestinal adhesions, or anatomical change of ureters because of huge mass within the pelvic cavity.

In conclusion, lipoleiomyoma is a rare and specific type of uterine leiomyoma and it can be diagnosed easily with examination and diagnostic modalities. However, in case of giant myomas the diagnosis can be difficult and masquerading as a malignant adnexal mass especially if there is fatty degeneration. So the physicians must be aware of those giant lipoleiomyomas in the differential diagnosis of semisolid and multilocular pelvic masses.