

# Abdominal Giant Mass in An Adolescent Girl: Uterine Leiomyoma

## Adölesan Bir Kızda Abdominal Dev Kitle: Uterus Leiomyomu

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### ABSTRACT

Uterine leiomyoma is very common in women, but it is extremely rare in adolescence. Herein, we present the case report of uterine leiomyoma in a 14-year-old girl. She was admitted to the hospital with complaints of abdominal distension and a palpable mass. Transabdominal ultrasound and magnetic resonance imaging revealed a mass with a diameter of 16 cm. Laparotomy and myomectomy were performed. The postoperative period was uneventful. The pathology report was uterine leiomyoma. In the follow-up, there was no pathological sign. Uterine leiomyomas should be considered in the differential diagnosis of abdominal pain and pelvic mass in adolescent girls.

**Key Words:** Adolescent, Myomectomy, Uterine leiomyoma

### ÖZ

Uterus leiomyomu kadınlarda çok sık görülür, ancak ergenlik döneminde oldukça nadir görülür. Bu olgu sunumunda, 14 yaşında bir kız çocuğundaki uterus leiomyom olgusunu sunuyoruz. Karında şişkinlik ve ele gelen kitle şikayeti ile hastaneye başvurdu. Transabdominal ultrason ve manyetik rezonans görüntülemeye 16 cm çapında kitle saptandı. Laparotomi ve myomektomi yapıldı. Postoperatif dönem sorun olmadı. Patoloji raporu uterus leiomyomuydu. Takipte patolojik bulguya rastlanmadı. Adölesan kızlarda karın ağrısı ve pelvik kitle ayırıcı tanısında uterus leiomyomu düşünülmalıdır.

**Anahtar Kelimeler:** Adölesan, Myomektomi, Uterus leiomyomu

### INTRODUCTION

Uterine leiomyomas are benign gynecological tumors originating from smooth muscle cells of the uterine wall. Although they are very common among women of reproductive age, are found in an estimated 20% to 30% of women under 50 years of age, are infrequently seen in children and adolescents, with few reported cases in the literature (1-3). In this case report, we presented a uterine leiomyoma in an adolescent girl with an abdominal giant mass.

### CASE REPORT

A 14-year-old girl was admitted to the hospital with complaints of abdominal distension for the last six months. In her history, complaints increased over time, swelling became apparent during the menstruation period and she had no menorrhagia or pain. On physical examination, a mass, approximately 17 cm, starting from the umbilicus into the pubis was palpated. On the abdominal ultrasonography, a mass of 12x10x16 cm size which could not be separated from the uterus was seen.

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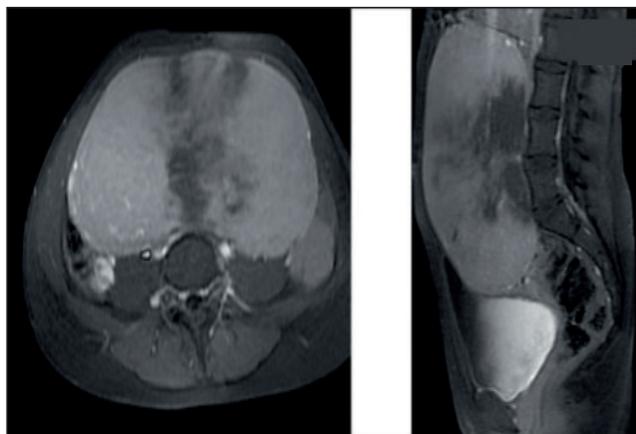
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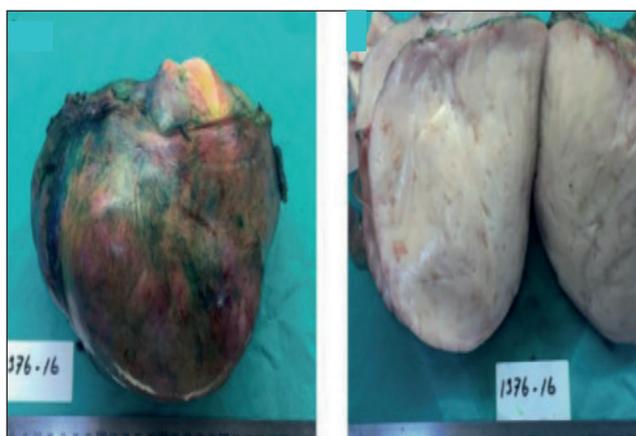
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**Figure 1:** The MRI view of the mass.



**Figure 2:** Macroscopic view of the mass

in the midline. In magnetic resonance imaging (MRI), a mass that extends from the level of the umbilicus to the pelvis, with heterogeneous enhancement in T1 and T2 weighted sequences and 17x18 cm in size, was detected (Figure 1). The ovaries could not be detected in the MRI. The patient's complete blood count, blood biochemistry, serum  $\beta$ hCG, and AFP levels were in the normal range. Only, the serum CA125 level was high (CA125=450(0-35)). Laparotomy was performed by midline incision under general anesthesia. In the exploration, a mass was observed in the pelvis with 15x20x20 cm size. The mass was invasive to the tube and uterus and pushed the right and left ovaries. Myomectomy was performed, mass excised by dissections, and preserved the ovaries, tubes, uterus, and bladder. The patient was followed up post-operatively. Oral feeding was started on the first day. She was discharged on the postoperative third day.

In the macroscopic examination, the mass was observed as 1808 g weighted, 20.5x15.5x11 cm in size, and with a smooth surface (Figure 2). In the pathological examination, the specimen was diagnosed as leiomyoma of the uterine which origins with tumor cells with strong staining of actin, desmin, and nuclear estrogen receptors. In the follow-up, ultrasonography was performed and there were no pathological signs in the ovaries and uterus.

## DISCUSSION

Leiomyomas are seen as rare in adolescents. Patients are usually admitted with the complaint of abdominal pain, back pain, palpation of an abdominal mass, increased abdominal volume, and abnormal menstrual bleeding (4). In adolescents, the leiomyoma size ranges from 7 to 30 cm (5). The etiology of uterine leiomyoma in adolescents is also unknown. There are some suggestions such as; leiomyomas might originate from intrinsic anomalies in the myometrium; congenitally elevated levels of sex steroids; and an endometrial injury acquired during menstruation (6). The biological behavior of these tumors in this age group is unknown, but the surgical treatment results are good with a low recurrence rate (4).

Although there are various treatment options such as medical treatment, uterine artery embolization, abdominal myomectomy, and hysterectomy in adult leiomyomas (7). The treatment of uterine leiomyoma in adolescents is myomectomy preserved fertility, also hysteroscopic myomectomy, and abdominal hysterectomy were reported (8). In our case, we performed a myomectomy. Recurrence after myomectomy is very rare, but patients should be followed up along with the adolescent (9). We followed up on our patient for two years by physical examination and ultrasonography. We did not find any pathological signs.

In conclusion, uterine leiomyomas should be considered in the differential diagnosis of abdominal pain and pelvic mass in adolescent girls. Although optimal treatment of uterine leiomyoma is still not defined, myomectomy is preferable, considering fertility in the future.

Informed consent: Informed consent was obtained from the patient and parents for publication of this case report.

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