

## Report Of Two Cases: Voluminous Paraovarian Cysts

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### ÖZET

**İki Olgu Sunumu: Çok Büyük Hacimli Paraovaryan Kistler**

*Karında distansiyon şikayeti ile başvuran iki genç kadında saptadığımız çok büyük hacimli paraovarian kistleri sunmak istedik.*

**Anahtar Kelimeler:** Paraovaryan kist, paratubal kist

### SUMMARY

**Report of two cases: Voliminouj paraovarian (yit5)**

*We would like to present here two cases of voluminous paraovarian cyst in two young women having abdominal distention problem.*

**Key Words:** Paraovarian cyst; paratubal cyst

### INTRODUCTION

Voluminous pelvic cysts are predominantly benign and may be mucinous ovarian neoplasms but rarely paraovarian cysts. Paraovarian cysts are usually small and asymptomatic. They rarely undergo torsion and require surgical removal. However, sometimes they can be larger than 44 cm and can even reach to 50 cm as observed in our two cases.

### CASES

Our first patient was a 23 years old healthy primigravid woman. Her menses were irregular and the main complaints were abdominal pain and discomfort for the last six months. In the transabdominal ultrasound, a 40x36x16 cm cystic mass filling the abdominal cavity from pelvis to the xiphoid process was seen. At sonography, the mass appeared to be a simple cyst with a thin wall. We did not see any solid nodular areas and septations within the cyst. Tumor markers values were measured before laparotomy and they were all within the normal range. The uterus, left fallopian tube and left ovary seemed normal at exploratory laparotomy. There was a cystic mass of 44x40x40 cm adjacent to the right ovary which itself appeared to be normal. The right fallopian tube overlaid this paraovarian cyst and fimbrial ends of the right tube was admixed with the cyst (**Figure 1A**). We performed right cystectomy with salpingectomy and pathological examination of frozen section samples revealed a benign nature. Final pathological examination results revealed a serous cystadenoma of

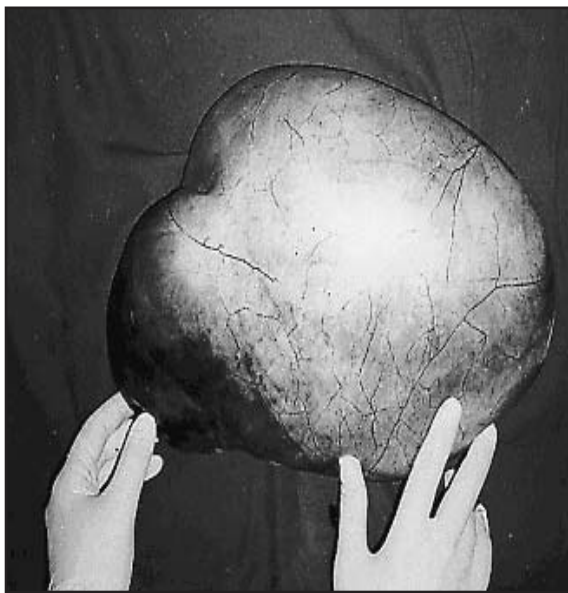
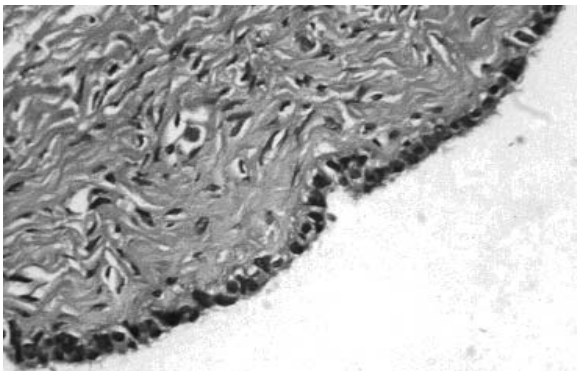
**FIGURE 1 A:** The macroscopic appearance of the first case



paratubal serous cystadenoma of paratubal origin (**Figure 1B**). She was discharged from the hospital on the third post-operative day. Our second patient was a 19 years old healthy single girl. Her main complaints were abdominal pain and discomfort for the last three months and she reported a weight gain of four kilograms in two months. In the transabdominal ultra-sound, a 40x30x20 cm cystic mass filling the abdominal cavity from pelvis to the xyphoid process has been observed. The mass had the appearance of a simple cyst which had neither solid nodular areas nor septations within the cyst and it seemed to have a thin wall at sonography. Tumor markers values were also in normal ranges. During exploratory laparotomy, uterus, left fallopian tube and left ovary had a normal appearance. Right ovary was normal but there

**Figure 1 B:** The microscopic appearance of the first case

was a neighboring paraovarian cystic mass of 50x45x10 cm. An elongated right fallopian tube overlaid the paraovarian cyst (**Figure 2A**). Right cystectomy was performed without damaging the fallopian tube. Preliminary pathological examination of the frozen section material revealed a benign nature. The final pathological examination gave the result of serous cystadenoma of paratubal origin (**Figure 2B**). She was discharged from hospital on the fifth post-operative day.

**FIGURE 2 A:** The macroscopic appearance of the second case**FIGURE 2 B:** The microscopic appearance of the second case

## DISCUSSION

Paratubal and paraovarian lesions may be epithelial, mesodermal or vascular (1). The most significant epithelial lesions mainly consist of benign cysts which are separated into two groups: paramesonephric (Mullerian) and mesonephric (Wolfian) cysts. The paramesonephric cysts which include the hydatid cysts of Morgagni, arise predominantly in the intraligamentous infratubal position along with the ampulla. They occasionally lie against the isthmus or cornu but they rarely arise subserosally on the free surface of the tube. Secondary tumefactions in these cysts are uncommon and consist largely of papillary serous cystadenoma or cystadenofibroma (1). Our two cases were serous cystadenomas which fall into epithelial and paramesonephric group.

Paraovarian cysts are encountered in 92% of all tubas examined. Because they are usually small and asymptomatic they are incidentally detected during pelvic surgeries performed for other reasons. Although paraovarian cysts rarely cause symptoms, they may be complicated with a torsion or an internal hemorrhage or rupture. Moreover, benign or malignant neoplasms may occasionally develop in paraovarian cysts. The risks of voluminous ovarian or paraovarian cysts are severe cardiovascular, pulmonary and circulatory problems in especially elder patients (2).

The dimension of the paraovarian cysts vary between 2 and 20 cm but most of the cases fall between 6-10 cm range (3). In the literature, there were at least four case reports for voluminous paraovarian cysts (2,4,5,6,7). The lengths of the cysts in our cases were 44 and 50 cm. The cases of paraovarian cysts usually show no symptoms. But occasionally show pelvic pain or menstrual disorders may be observed. Torsions of the cysts rarely occur but when they are present they cause severe symptoms such as pelvic pain (3). In our patients the presented symptoms were abdominal discomfort, abdominal pain and menstrual irregularities. Therapy was formed according to the patients age, parity, other existing gynecological pathologies and presence of neoplastic degeneration. Giant paraovarian cysts are unusual masses being usually treated by laparotomy. The safety of

laparoscopic management of benign paraovarian cysts has been demonstrated, but it is believed that the size of benign paraovarian cysts is a limiting factor for laparoscopic surgery (5). Along with the cystectomy we were forced to perform a salpingectomy in our first case because it was impossible to remove the paraovarian cyst without damaging the neighboring fallopian tube, but we were able to conserve the left fallopian tube in our second case.

All paraovarian cysts are thin walled, unilocular, anechoic at the ultrasound (8). Paraovarian cystadenomas are cystic masses containing usually one or more small solid nodules but occasionally septations (9). During routine ultrasound examinations paraovarian cysts can be misdiagnosed as ovarian cysts, peritoneal inclusion cysts or hydrosalpinx (10). None of our patients could be diagnosed as paraovarian cysts during preoperative ultrasound examination. In conclusion, during ultrasound examination it has to be taken into consideration that a voluminous cyst can be paraovarian in nature.

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