



LETTER TO THE EDITOR

Minimally invasive management of a giant paratubal cyst

Dev bir paratubal kistin minimal invaziv tedavisi

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To the Editor;

Para ovarian (POC) or para tubal cysts are situated between the ovary and the fallopian tube. They are normally benign, and paratubal cysts are deemed giant when they exceed 150mm in size. Large cysts are typically treated using open surgery due to the challenge of exploration. In our instance, the cyst size was lessened by draining it transabdominal, making it simpler to visualize. The cyst capsule was detached, leaving the overlying tube intact and maintaining fertility preservation. Both paratubal and para-ovarian cysts are situated within the mesosalpinx, a large ligament, and may also arise from paramesonephric or mesonephric rest tissues¹.

Para ovarian cysts larger than 30mm require surgical removal due to ongoing growth and risk of torsion. Generally, these giant cysts in young women are benign and can be treated via surgical excision through cystectomy or salpingo-oophorectomy². In general, the limitations of laparoscopy arise due to the massive size of the mass, potential malignancy, or lack of expertise in minimally invasive procedures by the surgeon³.

We present a 24-year-old patient who has never had sexual intercourse, referred to our centre with abdominal distension. According to the patient's medical history, she had a simple ovarian cyst of 4 cm in diameter 3 years ago. Our patient disregarded this situation for 3 years and evaluated her abdominal distension as weight gain. During the examination, we observed a mobile, non-rigid, and not entirely solid abdominal mass extending from the pelvis to the diaphragm. The patient was assessed using

abdominal magnetic resonance imaging (MRI) and abdominal sonography (USG). Both imaging techniques revealed that the bilateral ovary was of natural size and appearance. However, a large, benign ovarian/paratubal cyst measuring approximately 30x30 cm was detected, without any solid component (refer to Figure 1). The patient's tumor marker levels were found to be within the normal range, with AFP at 1.11 IU/ml, CA125 at 10.7 IU/ml, CA19.9 at 13.3 U/ml, CEA at 0.731 IU/ml, and CA15.3 at 18.2 U/ml.

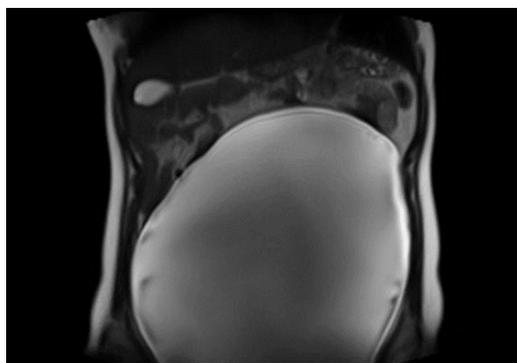


Figure 1. A craniocaudal view of the giant cystic lesion in the abdomen of a 24-year-old female patient.

Laparoscopic surgery was selected as an intervention for the patient following examinations performed to minimize invasiveness. The patient's bladder was emptied by catheterisation using a Foley catheter. Access to the cyst capsule was provided via insertion of a 5 mm trocar at the same site as before. The entry site was assessed using USG for the absence of

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bowel. Following aspiration of clear-coloured serous liquid, amounting to 4000 ml, the cyst demonstrated reduction in size to 1.5 cm below the umbilicus as assessed with USG. The abdomen was entered using a 10 mm trocar, positioned 1.5 cm above the umbilicus. Carbon dioxide was administered, with a volume of 2.5 litres, into the abdomen. Upon laparoscopic observation of the abdomen, the cyst was identified as originating from the right paratubal region, measuring 15 cm in size. The cyst capsule was then extracted by grasping it from within (refer to Figure 2A, B), with careful attention paid to the condition and resilience of the tube. The tuba remained fully intact throughout the procedure. The patient's fertility was conserved by the removal of the

giant paratubal cyst using a minimally invasive technique. The operation was carried out in the morning, and the patient was discharged on the same day. According to histopathology, the cyst was identified as a serous cyst-adenoma. Giant paraovarian-paratubal cysts are uncommon among reproductive-aged individuals. Objectively speaking, histopathologically, POC are usually benign and can be categorized as either simple cysts (74.6%) or benign neoplastic lesions (25.4%) such as cystadenomas and cystadenofibromas. It is important to note that technical term abbreviations such as POC and cystadenomas should be clearly explained when first introduced⁴.



Figure 2 A) Shrunken cyst capsule after aspiration, B) Image when the cyst capsule is taken out of the abdomen

USG and MRI can aid in diagnosing ovarian, paraovarian or mesenteric cysts; however, these imaging methods may not always provide a definitive differential diagnosis⁵. Laparotomy is the preferred method for obtaining clear images of large tumours and cysts. In our case, preoperative ultrasonography and MRI were insufficient in distinguishing between ovarian and paraovarian cysts. The traditional surgical approach for removing giant ovarian and paratubal cysts is midline laparotomy. It may occasionally be necessary to remove the ovary or the tube. In recent times, minimally invasive techniques have been increasingly used for giant ovarian cysts due to the advantages of laparoscopic surgery⁶.

The spread of cyst fluid into the abdomen is a potential risk of laparoscopic cyst surgery. In this particular case, the minimally invasive intervention was chosen as tumor markers and imaging techniques revealed benign results. Using a 5 mm trocar placed in the suprapubic area, the fluid from a paraovarian cyst was drained, reducing the cyst to the level of the navel. Sufficient space for exploration is afforded by this method; the patient's fertility was preserved with minimal invasiveness. In our case, laparoscopic exploration was necessary for determining the size and borders of the giant cyst. The challenges of preserving fertility were surmounted through minimally invasive intervention⁷.

In conclusion, it is argued that laparoscopy is a viable option for managing giant paraovarian or paratubal cysts. The literature reports only a small number of cases of giant paratubal serous cystadenoma (SCA), most of which occurred in adult females⁸. Despite advancements in preoperative diagnosis, diagnosing adnexal masses remains challenging⁹. Giant paratubal SCAs are rare in adolescent-early adult women but have a good prognosis, as demonstrated in our case. Fertility-sparing surgery should be the preferred approach, as was done in our case.

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