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Obstetrics and Gynaecology

# Huge Bilateral Paramesonephric Cysts in a 25 year old Nulliparous woman

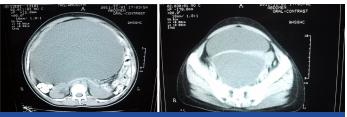
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### **ABSTRACT**

Paraovarian cysts are uncommon adnexal masses which are usually asymptomatic. We describe a case of bilateral huge paramesonephric cysts in a nulliparous woman. A 25-year-old lady presented with abdominal distension for one year duration. Examination and imaging revealed large abdominopelvic cystic masses with no solid areas or septations. Intraoperatively there were huge bilateral paraovarian cysts which were excised. Histopathology revealed low cuboidal to ciliated columnar epithelium with no evidence of ovarian parenchyma suggestive of paramesonephric cyst. Paraovarian cyst should be included in the differential diagnosis of a cystic mass visualised on ultrasound.

# **CASE REPORT**

A 25-year-old nulligravida, married for 2 years presented with abdominal distension and weight loss for one year duration. She gave occasional history of pain abdomen. Her menstrual cycles were normal. No other significant past or family history. On examination the abdomen was distended up to the xiphisternum. On bimanual pelvic examination, the uterus was not felt separately and a cystic mass was felt through the posterior fornix. Tumour markers-hCG,PLAP,CA125 and  $\alpha FP$  were normal were normal. Ultrasound and a subsequent CT scan [Table/Fig-1] revealed



[Table/Fig-1]: CT scan images showing bilateral cysts probably ovarian in origin



# Keywords: Paraovarian cysts, Paramesonephric cyst

bilateral large abdominopelvic cystic masses with no solid areas or septations. Ovaries were not visualised separately. There was no ascites and lymphadenopathy, and other abdominal viscera were normal. The provisional diagnosis was bilateral ovarian cysts and staging laparotomy was planned. Intraoperatively there were bilateral paraovarian cysts, the left measuring  $40 \times 40$  cm [Table/ Fig-2] and the right measuring  $30 \times 30$  cm. Both the fallopian tubes were stretched over the cysts and were separated intact. Uterus and both ovaries were normal. Bilateral paraovarian cystectomy was done. Histopathology revealed low cuboidal to ciliated columnar epithelium with no evidence of ovarian parenchyma, suggestive of paramesonephric cyst. Her post-operative period was uneventful. She was discharged home on the  $7^{\rm th}$  day.

## DISCUSSION

Parovarian cysts are responsible for about 10% of all adnexal masses. They arise from the tissues of the broad ligament, predominantly from mesothelium covering the peritoneum but also from paramesonephric and mesonephric remnants.

The majority have been reported in young women and rarely are they large enough to be clinically significant [1]. Most patients are without symptoms. When large, they become symptomatic due to pressure effect, lower abdominal pain, abdominal distension and menstrual irregularities. It is difficult to distinguish an ovarian mass from one arising in the parovarium. Complications include torsion, haemorrhage and neoplasm within the cyst. Clinically, torsion of a paraovarian cyst is uncommon, and it is difficult to distinguish it from torsion of other adnexal masses, an ovarian accident, appendicitis, etc. [2]. Papillary serous Cystadenoma, borderline tumour and endometrial sarcoma arising in paraovarian cysts have been reported [3-5].

Paraovarian cysts can show a wide range of sonographic features [6]. Sonographically they are usually thin-walled, smoothly marginated, unilocular cysts. Their risk of malignancy is low if no papillary projections are detected at transvaginal sonography, but when mural proliferations are present, a borderline tumor can be found at pathological examination. MRI might be useful in making a preoperative diagnosis [7]. On microscopic examination a basement membrane may be demonstrated beneath the mesonephric

epithelium, although such a layer is usually absent in the mullerian structures.

Pre-operative diagnosis of paraovarian cyst is difficult and it should be included in the differential diagnosis along with large physiologic ovarian cysts and unilocular ovarian cystadenoma when cystic mass is visualised on ultrasound.

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