

# Bilateral Gigantic Paraovarian Cysts in Adolescent Girl: A Real Challenge

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#### ABSTRACT

**Introduction:** Giant paraovarian cyst equivalent to term size pregnancy in young adolescents present a challenge in diagnosis and management. Paraovarian cysts are rare, usually small and unilateral but in this case it was giant and bilateral so rarest variety.

**Case report:** 18 year old girl presented with complaints of lump abdomen increasing in size for one year. Abdominal palpation revealed cystic mass equivalent to term size gravid uterus, non-tender with fluid thrill. Laboratory tests and tumour markers were normal. Ultrasound and CT scan revealed a large cyst with clear fluid collection filling entire peritoneal cavity. During laparotomy huge, unilocular, tense, smooth surfaced cystic mass arising from right broad ligament of 30\*25 cm and on left side similar broad ligament cyst of size 15\*10 cm with clear liquid content (8 litre on right side and 2 litre from left side) were seen. Bilateral ovaries were normal while tubes were elongated along the cystic masses. The cystic masses were extirpated preserving the woman's reproductive capacity. Histopathology - simple cyst.

## INTRODUCTION

Giant paraovarian cyst equivalent to term size pregnancy in young adolescents are challenging in diagnosis and also in management. Paraovarian cyst are rare usually small and unilateral but in this case it was giant and bilateral so rarest variety.

**Definition**: Epithelium lined fluid filled cysts adnexa adjacent to ovary and fallopian tubes.

**Origin**: From mesothelium and are presumed to be remnants of the mullerian duct and wolfian duct.<sup>1</sup>

**Incidence**: In all age groups, most common in third to fifth decade<sup>2</sup>, constitute about 10% of adenexal masses.<sup>3</sup>

Usually asymptomatic, discovered accidently during operation. Complications like torsion, haemorrhage, rupture occasionally occurs. Voluminous enlargement can very rarely happen.

In sonography they have characteristics as a ovarian cyst and differentiated by small role adjacent to ovary and in persistence. Magnetic resonance (MRI) is also definitive investigation.

#### CASE REPORT

**History**: A 20 years unmarried female came with complaint of gradually increasing abdominal lump & vague pain for one year. Patient sought medical attention for complaint without any relief. **Examination**: Vitals stable and system examination within normal limit.

**Conclusion**: Above case was diagnosed as ovarian cyst on ultrasound and CT but it was turned out to be huge bilateral paraovarian cysts on laparotomy.

**Key words:** Term Size Abdominal Lump, Laparotomy, Simple Cyst.

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**P/A:** distended abdomen with huge nontender cystic mass originating from pelvis, filling whole abdominal cavity.

AG – 42 inches, Bowel rounds heard over the flanks fluid thrill present.

Laboratory tests and tumor marks within normal limit.

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Ultrasonography and CT scan showed large thin walled cystic lesion arising from pelvic cavity and seen extending into whole abdomen displacing the bowel loops peripherally. No internal septations or mural nodule seen within lesion. There was another cystic lesion present posterior to the bladder in cul-de-sac. Bilateral ovaries not visualized. Uterus was normal in size and ecotexture.

**Provisional Diagnosis:** Bilateral huge ovarian cysts. Treatment laparotomy planned.

**Peroperative Finding:** Huge unilocular tense smooth surfaced cystic mass (30X20 cm) arising from right broad ligament seen. 8 litre of clear fluid was drained. Similar cyst in the left broad ligament of size 15x10 cm was seen and 2 litres of fluid was drained.

Fallopian tubes of both sides were stretched elongated and measured around fifteen inches. The ovaries were normal on both side, uterus was of normal size. No free fluid present in abdomen. Bilateral cystectomy done without damaging both ovaries and fallopian tubes. Post-operative period was uneventful.



Fig 1: Per abdomen finding of above case (equivalent to term size pregnancy)



Fig 3: Huge Right Paraovarian Cyst



Fig 5: Bilateral Outstretched Fallopian tubes after Cystectomy on both sides



Fig 7: Left Paraovarian cyst after removal



Fig 2: Straw colored fluid aspirated from cyst during operation



Fig 4: (A) Uterus; (B) Left Paraovarian Cyst; (C) Outstretched Left Fallopian tube



Fig 6: Right Side Ovary and reconstructed right side fallopian tube

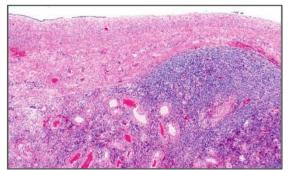


Fig 8: Histopathology; Serous Cystadenoma

### DISCUSSION

Paraovarian cysts are usually small in size 1-8 cm in diameter<sup>1</sup>, but size 20 cm or more have been reported but very few studies have been reported.<sup>4</sup> Usually single but bilateral can occur very rarely.<sup>5.6</sup>

Preoperative diagnosis by ultrasound has been described and MRI is also good tool but in most cases definitive diagnosis is made during operation. Most of the times misdiagnosed as ovarian cyst or mesenteric cyst if voluminous enlargement occurs. Treatment is enculeation of the cyst from the mesosalpinx without damaging the ovary and fallopian tube in uncomplicated cases. Sometimes salpingoopherectomy is needed in complicated cases like torsion with circulatory disturbance.<sup>7</sup> Laparoscopic removal is reported but was not feasible in this case because of hugs size.

Usually benign but on rare occasions can give rise to borderline tumor and malignancy (2-3% cases).<sup>8,9</sup>

#### CONCLUSION

Huge paraovarian cyst in adolescent age group are rare, pose challenge in diagnosis. As in our case it was diagnosed as ovarian cyst and turned out to be paraovarian cyst. Voluminous enlargement of 35 x 20 cm is very rare in paraovarian cyst and that too bilaterally is rarest. Patient was managed successfully. Awareness is warranted to suspect it.

Cystectomy in uncomplicated case. Sometimes salpingoopherectomy is needed in complicated cases like torsion with circulatory disturbance.<sup>7</sup> Malignancy risk also has to be taken into account.

#### REFERENCES

1. Kideli M, Caglar GS, Cengiz SD, KaradagD,Yilmaz MB. Clinical diagnosis and complications of paratubal cysts: Review of the literature and report of uncommon ca. Arch Gynecol Obstet 2012, 285: 1563-69.

 Damle F, Cromez - lobo V. Giant paraovarian cysts in young adolescents: a report of three cases. J Repord Med 2012,57:65-7.
Barloon TJ, Braun BP, Abu-Yousef MM, Warnock NG. Paraovarian and paratubal cysts: preoperative diagnosis using transabdominal and transvaginalsonography. J Clin Ultrasound. 1966; 24: 117-22.

4. Varras M, Akrivin C, Polyzos D, Frakala S, Samara C. A voluminous twisted paraovarian cyst in a 74- year-old patient: case report and review of the literature. Clin Exp Obstet Gynecol. 2003; 30:253-6.

5. Genarady R, Parmley T, Woodruff JD. The origin and clinic behaviour of the paraovarian tumor. Am J Obstet Gynecol 1977; 129: 873-80.

6. Kim JS, Wou SK, Suh SJ, Morettin LB. Sonographic diagnosis of paraovarian cysts: value of detecting a separate ipsilateral ovary. AJR Am J Roentgenol 1995; 164: 1441-4.

7. Okada T, Yoshida H, Matsunaga T, Kouchi K, Ohtsukall, Tokano H et al : Paraovarian cyst with torsion in children. J. Pediatr Surg 2002; 37: 937-40.

8. Suzuki S, Furukawa H, Kyozuka H, Watanabe T, Takahashi H, Fujimori K. Two cases of partaovarian tumor of borderline malignancy. J Obstet Gynaecol Res 2013; 39: 437-41.

9. Honore L, O' Hare K. Serous papillary neoplasms arising in paramesonephric paraovarian cysts. Acta Obstet Gyneco Scand 1980; 59: 525-8.

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