



SURGICAL MANAGEMENT OF A GIANT OVARIAN CYST IN AN ADOLESCENT

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**ABSTRACT**

**Introduction:** Ovarian cysts constitute a common pathology in adult women and are often asymptomatic. However, there is little epidemiological data on its distribution among adolescents. **Observation:** Through clinical observation, we retrace the diagnostic difficulties encountered and the possible surgical options to manage two cystic ovarian lesions including a giant cyst in a 17-year-old girl who benefited from a laparotomy for bilateral cystectomy with ovarian preservation. **Conclusion:** Laparotomy is a viable option for giant ovarian cysts when imaging cannot rule out the malignancy of a lesion in adolescents

**KEYWORDS :** Ovarian Cyst In Adolescent, Laparotomy, Laparoscopy, Ovarian Tumor.

**INTRODUCTION:**

Atypical and symptomatic ovarian cysts are not common in adolescents and children [1] in the majority of cases these cysts are discovered incidentally during an abdominal ultrasound and are often functional or physiological.

The lack of epidemiological data on this pathology in this age group is responsible of surgical management that is poorly codified and adapted on a case-by-case basis.

We report the case of a 17-year-old adolescent girl hospitalized in our hospital for abdominal pain with postprandial vomiting and whose radiological exploration by abdominal CT and MRI revealed two cystic lesions of a very large volume.

**Observation:**

A 17-year-old girl was seen in surgical consultation for abdominal pain with vomiting for 8 months, not relieved by symptomatic treatment.

Examination of the abdomen finds tenderness in the hypogastric site with an overall supple abdomen.

The biological assessment was unremarkable and notably a normal CRP.

An abdominal ultrasound revealed two cystic lesions including a left ovarian lesion with dual tissue and fluid components.

An abdominal CT scan provided the measurements of these two lesions, including a right ovarian cyst measuring 19 cm long axis and a suspicious left cyst measuring 8.5 cm. (fig 1-2)

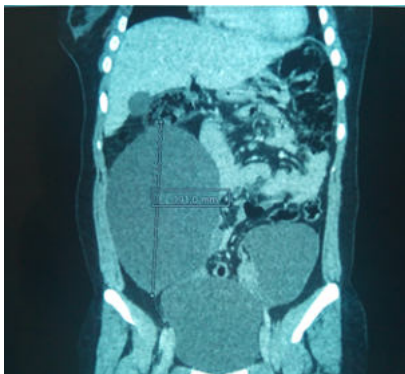


Figure 1 : frontal incidence of abdominal CTscan

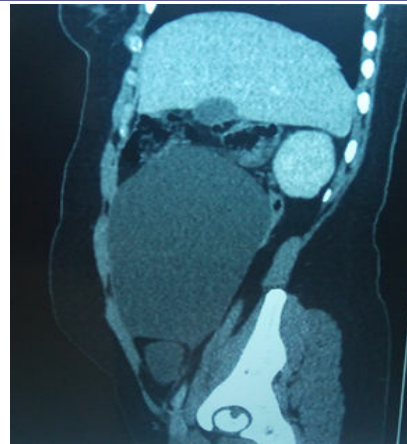


Figure 2 : sagittal on CT scan

An abdominopelvic MRI was performed without any real benefit in terms of characterizing these lesions compared to CT.

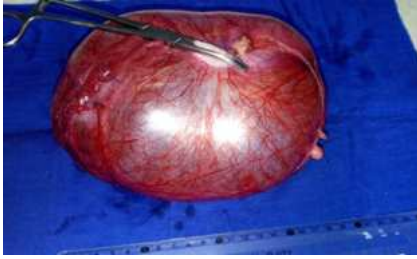
The CA125 dosage was normal. The persistent doubt about the nature of the tissue component of the left lesion guided us towards a cautious attitude, that of opting, after consent of the parents of this young patient, for a classic laparotomy instead of a laparoscopy for complete resection of the two lesions without intraperitoneal rupture.

A median laparotomy under general anesthesia in the patient found on surgical exploration a giant macroscopically serous cyst in the right ovary (fig 3) and a second smaller but suspicious left ovarian cyst.



figure 3 : operative view after laparotomy

A bilateral cystectomy was performed without cyst rupture with ovarian preservation (fig 4).



**Figure 4 : specimen of right ovarian cyst**

The operative consequences were without any notable events and the patient left the hospital on day + 4.

The pathological examination concluded in a serous cystadenoma on the right and a mucinous cystadenoma on the left lesion.

#### **DISCUSSION:**

the choice of laparotomy in the treatment of an ovarian cyst may be dictated by age greater than 35 years and the presence of more than a single cyst[2]. the suspicion of a malignant or borderline tumor may also require the avoidance of laparoscopy to prevent the spread of cancer cells.

Laparoscopy, which constitutes a minimally invasive approach, can be responsible in the case of an ovarian tumor for intraoperative rupture, incomplete resection of the lesion or metastasis on the trocar sites [3]. Laparoscopy can only be considered for lesions typically characterized as benign preoperatively[4].

There are no randomized trials concerning the laparoscopic management of giant ovarian cysts and few observations are reported in the literature[5], but laparoscopy remains a gold standard when the lesion is judged to be benign preoperatively.

The question of post-operative fertility constitutes a very heavy element in the surgical management of ovarian cysts in adolescents and requires a meticulous pre-operative diagnosis and an ideally conservative attitude to the ovaries[6]

Serous or mucinous cystadenomas are the most common epithelial neoplasms but remain rare in children[7].

#### **CONCLUSION:**

Laparoscopy remains a gold standard for the management of cystic lesions of the ovary in adolescents judged to be benign on preoperative imaging and in the absence of positivity of tumor markers. however classic laparotomy can offer a lower risk of tumor rupture or incomplete resection when doubt persists about the nature of the ovarian lesion after the preoperative assessment.

#### **Disclosure:**

This article does not contain any patient identifiers nor was the patient care affected or influenced in any way

#### **Conflicts of interest:**

The authors declare that there are no conflicts of interest regarding the publication of this paper

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