

Evaluation of Patients with Ovarian Cysts: A Retrospective Analysis at a Tertiary Care Teaching Centre

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ABSTRACT

Background: Most ovarian cysts are asymptomatic and disappear spontaneously. When ovarian cysts are large, they may cause abdominal discomfort. Hence; we planned the present study to retrospectively analyse the patients with ovarian cysts.

Materials & Methods: The present retrospective study included assessment of data of patients with ovarian cysts. Routine haematological and biochemical investigations were carried out in all the patients. By the procedure of colpotomy or through the side port of laparoscopy, specimens were obtained and were sent for histopathologic examination. Retrospective assessment of data records of the follow-up and in relation to clinical and histopathologic findings were obtained.

Results: Mean age of the subjects included in the present study was 37.6 years. Haemorrhagic cyst, Para ovarian cyst, Endometriotic cyst, Simple follicular cyst and Corpus luteum cyst were the commonly observed ovarian cysts in the present study.

Conclusion: Endometriotic cyst and Corpus luteum cyst were the most commonly encountered ovarian cysts.

Key words: Cyst, Laparoscopic, Ovarian.

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INTRODUCTION

The epidemiology of ovarian cysts is unclear due to the lack of consistent reporting and a high likelihood of spontaneous resolution. Screening studies have shown that around 7% of both premenopausal and postmenopausal women have ovarian cysts. The lifetime risk of ovarian cancer in women with no affected relatives is one in 60. The relative risk to first-degree relatives is 3.1, and the relative risk increases to 7.18 in women, who have two or more first-degree relatives. The clinical problem in diagnosing an ovarian cyst is to exclude malignancy. Operation on benign lesions may be avoided, whereas a suspicion of malignancy should lead to an accelerated operative assessment by gynecologic oncologists.¹⁻³

Most ovarian cysts are asymptomatic and disappear spontaneously. When ovarian cysts are large, they may cause abdominal discomfort. If pressing on the bladder it may also cause frequency of urination. The signs and symptoms of ovarian cysts may include; pelvic pain, dysmenorrhoeal, and dyspareunia. Other symptoms are nausea, vomiting, or breast tenderness, fullness and heaviness in the abdomen and frequency and difficulty emptying of the bladder.^{4,5} Patients with clear, simple ovarian cysts diagnosed by ultrasound might not require any treatment.

However, monitoring using serial ultrasonography was carried out in women with simple ovarian cysts smaller than 5 cm in diameter and a normal CA 125.⁶⁻⁸ Hence; we planned the present study to retrospectively analyse the patients with ovarian cysts.

MATERIALS & METHODS

The present retrospective study was planned in the Department of Obstetrics & Gynaecology, Rama Medical College Hospital & Research Centre, Pilkhuwa, Hapur, Uttar Pradesh (India) and it included assessment of data of patients with ovarian cysts. Evaluation of data of the patients was done for assessing the histopathologic and clinical findings. Most of the cases were operated by laparoscopic procedures. Few cases, in which the lesion was very large, conventional laparotomy was done. In majority of the cases, diagnosis of the lesion was made by chance on ultrasonography for non-specific clinical symptoms.

Exclusion Criteria

- Patients with negative findings of presence of any other co-morbid condition,
- Patients above 55 years of age,

Routine haematological and biochemical investigations were carried out in all the patients. By the procedure of colpotomy or through the side port of laparoscopy, specimens were obtained and were sent for histopathologic examination. 2 days after the laparoscopic surgery and one week after the laparotomy, all the patients were discharged. Follow-up records were obtained in all the patients two weeks after the discharge. Retrospective assessment of data records of the follow-up and in relation to clinical and histopathologic findings were obtained. Compilation of all the records was done on Microsoft excel sheet and was assessed by SPSS software. Chi-square test was used for assessment of level of significance.

RESULTS

Data records of a total of 50 patients were analysed in the present study. Mean age of the subjects included in the present study was 37.6 years. Haemorrhagic cyst, Para ovarian cyst, Endometriotic cyst, Simple follicular cyst and Corpus luteum cyst were the commonly observed ovarian cysts in the present study. Endometriotic cyst, Simple follicular cyst and Corpus luteum cyst were the most commonly observed lesions seen to be present in 24 percent, 20 percent and 24 percent of the patients. Commonly observed symptoms observed in the present study were pain, abdominal mass, dysmenorrhoea and post-menopausal bleeding. Incidental findings were present in 20 percent of the patients.

Table 1: Frequency of ovarian lesions

Type of lesion	Number of cases	Prevalence
Haemorrhagic cyst	7	14
Para ovarian cyst	9	18
Endometriotic cyst	12	24
Simple follicular cyst	10	20
Corpus luteum cyst	12	24
Total	50	100

Graph 1: Frequency distribution of ovarian lesions

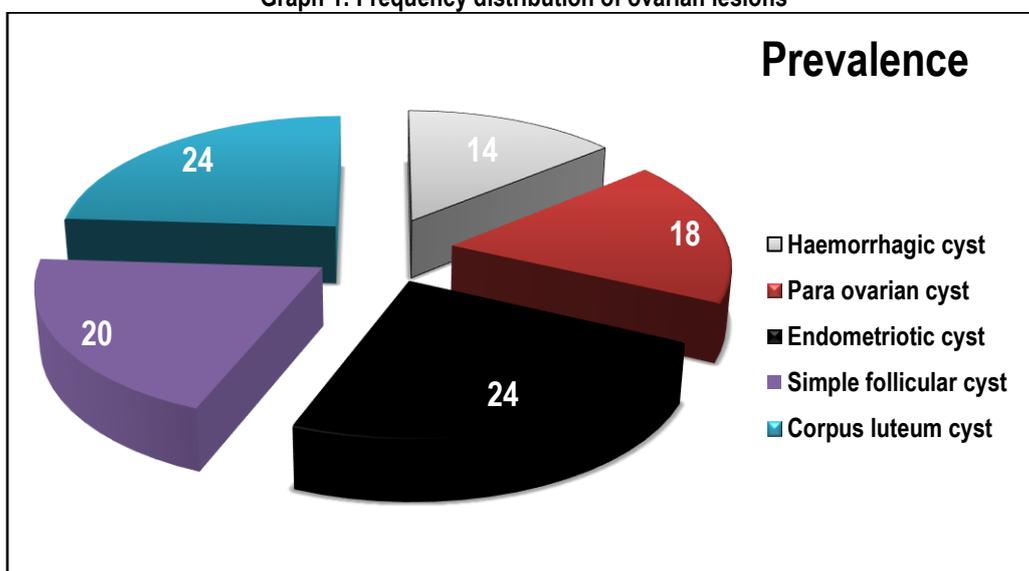


Table 2: Symptoms of cystic ovarian lesions

Symptoms	Number of patients	Percentage
Pain	23	46
Abdominal mass	10	20
Dysmenorrhoea	4	8
Post-menopausal bleeding	3	6
Incidental findings	10	20

DISCUSSION

In the present study, data records of a total of 50 patients were analysed in the present study. Haemorrhagic cyst, Para ovarian cyst, Endometriotic cyst, Simple follicular cyst and Corpus luteum cyst were the commonly observed ovarian cysts in the present study. Commonly observed symptoms observed in the present study were pain, abdominal mass, dysmenorrhoea and post-menopausal bleeding. Incidental findings were present in 20 percent of the patients. Simcock B et al optimized the treatment of malignant and premalignant cysts while minimizing intervention for

cysts likely to resolve spontaneously. In this retrospective study, ovarian cysts over 30 mm in diameter were detected in 90 women. Of this population, 75 were premenopausal, 13 postmenopausal, and two had undergone a hysterectomy. Thirteen women presented acutely. Family history of breast, ovary or colon cancer was not ascertained in any of the women. None had CA125 levels performed. In 22 cases, the cyst was aspirated; only 10 of these had follow-up ultrasound. Laparotomy was performed in 25 premenopausal women, the two perimenopausal women and eight postmenopausal women. Average cyst size was 71 mm

(range 40-80 mm) in the laparoscopy group, and 72 mm (range 36-180 mm) in the laparotomy group. After initial diagnosis at ultrasound, a follow-up scan was performed 4-16 weeks later. The final diagnosis was ovarian neoplasm in 13 and hydrosalpinx in two. None had a malignancy. Documentation at ultrasound was often inadequate, and management of the women with an ovarian cyst was haphazard.⁹

Gupta B et al conducted a retrospective review of incidence, clinical practice, surgical management and histology of adolescent ovarian masses in order to audit and improve future practices. Complete hospital records of all adolescents between 10 and 20 years who had undergone surgery for ovarian masses were analysed. Parameters analysed were age, clinical features, diagnosis, operative procedure and histopathology. Ninety-four patients were included in the study and among them, 37 had non-neoplastic masses, 30 had benign neoplasms while 27 had malignant tumors. The main clinical presentations were abdominal pain (54%) and abdominal mass (41%). Dermoid was the most common benign neoplasm while germ cell tumor was the most common malignant mass; dysgerminoma being the commonest (68%). Malignancy was more common in early adolescence while non-neoplastic masses were seen more frequently in late adolescence. There was a fair correlation between ultrasound and histopathological diagnosis.¹⁰ Aydin BK et al investigated the characteristics of children with ovarian cysts and evaluate treatment strategies. Patient data collected via retrospective chart review. Patients were stratified according to age into 4 groups (newborns, 1-12 months, 1-8 years, and 8-18 years). Most newborns and infants were asymptomatic with the cysts being discovered incidentally; in girls ages 1-8, symptoms were common, including breast budding (47.1%, 16 of 34) and vaginal bleeding (29.4%, 10 of 34). Girls older than 8 years mostly presented with abdominal pain (31.6%, 12 of 38) and menstrual irregularity (21.1%, 8 of 38). Most of our patients were diagnosed with a simple ovarian cyst, but 9 patients were found to have ovarian tumors. Ovarian torsion was detected in 7 patients; 5 with large and 2 with small cysts (<20 mm). Two patients had central precocious puberty (CPP) at presentation and 5 patients developed CPP during follow-up. The surgical intervention rate was high (38%, 38 of 100), but was associated with earlier treatment year, and this association remained significant after adjusting for confounders ($P = .035$). Most girls have simple cysts, which have a favorable prognosis without intervention; however, there might be coexisting pathologies or complications such as tumors, torsion, and CPP; hence these patients should be evaluated accordingly and treated with a multidisciplinary approach.¹¹ Abduljabbar HS et al reviewed cases of ovarian cysts managed at a University Hospital, and to identify the factors necessitating the use of laparotomy over laparoscopy. There were 244 cases of ovarian cysts during the study period. The age ranged from 3 months to 77 years of age. The weight range from 3-161 kg, and calculated body mass index ranged from 12-47. Out of 244 patients diagnosed, 165 were married (67.4%). Of those, only 16 patients were pregnant (6.6%). The most common presentation was abdominal pain in 142 patients (58.2%). Only 79.9% were ovarian cysts, and 17.5% were either para-ovarian or retroperitoneal. The right ovaries were affected in 63.1%, and only 18.9% were bilateral. The types of ovarian cysts included

functional cysts 33.2%, benign cyst-adenoma 19.3%, and dermoid cysts 12.3%. Factors associated with laparotomy management rather than laparoscopy included older age >35, single, pregnant, or patients presenting with abdominal pain, and more than one cyst.¹²

CONCLUSION

Ovarian cysts represent a common health problem among women these days. Endometriotic cyst and Corpus luteum cyst were the most commonly encountered ovarian cysts. However; further studies are recommended.

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