# Journal of Advanced Medical and Dental Sciences Research

## @Society of Scientific Research and Studies

Journal home page: <a href="www.jamdsr.com">www.jamdsr.com</a> doi: 10.21276/jamdsr ICV 2018= 82.06

(e) ISSN Online: 2321-9599; (p) ISSN Print: 2348-6805

# Original Research

# **Evaluation of cases of ovarian cysts**

Avantika Singh

Associate Professor, Department of Obstetrics & Gynaecology, Major S D Singh Medical College, Farukkhabad, Uttar Pradesh, India

#### ABSTRACT:

**Background:** An ovarian cyst is a common gynecological problem and is divided into 2 main categories; physiological and pathological. The present study was conducted to evaluate ovarian cysts. **Materials & Methods:** 85 cases of ovarian cysts were recorded. Clinical presentation, such as vaginal bleeding, abdominal pain or swelling, number of cysts, unilateral or bilateral, clear cysts or complicated, plus the location or side of the cysts and type and infertility were recorded. **Results:** Age group 20-25 years had 34, 25-30 years had 30 and >30 years had 21 cases. Common type was dermoid in18, functional in 24, benign cyst adenoma in 20, endometriosis in10, malignant in 7 and complicated in 6 cases. Patients were single (24) and married (61), type was ovarian in 81, paraovarian in 3 and retroperitoneal in 1 case, side was left in 30 and right in 55. Clinical features were abdominal pain in 38, vaginal bleeding in 56, abdominal swelling in 63 and infertility in 12 cases. **Conclusion:** common type was dermoid, functional, benign cyst adenoma, endometriosis, malignant and complicated.

**Key words:** Dermoid, Endometriosis, Ovarian cyst.

Received: 8 May, 2019 Accepted: 15 May 2019

Corresponding Author: Dr. Avantika Singh, Associate Professor, Department of Obstetrics & Gynaecology, Major S D Singh Medical College, Farukkhabad, Uttar Pradesh, India

**This article may be cited as:** Singh A. Evaluation of cases of ovarian cysts. J Adv Med Dent Scie Res 2019;7(8): 301-304.

## INTRODUCTION

An ovarian cyst is a common gynecological problem and is divided into 2 main categories; physiological and pathological. Physiological cysts are follicular cysts and luteal cysts. Pathological cysts are considered as ovarian tumors, which might be benign, malignant, and borderline. Benign tumors are more common in young females, but malignant are more frequent in elderly females. Most ovarian cysts are asymptomatic and disappear spontaneously. When ovarian cysts are large, they may cause abdominal discomfort.<sup>2</sup> If pressing on the bladder it may also cause frequency of urination. The signs and symptoms of ovarian cysts may include; pelvic pain, dysmenorrheal, and dyspareunia. Other symptoms are nausea, vomiting, or breast tenderness, fullness and heaviness in the abdomen and frequency and difficulty emptying of the bladder.<sup>3</sup>

Ovarian masses are categorized as functional cysts, benign neoplasms, or malignant neoplasms. In a review of females under the age of 21 undergoing surgery for an adnexal mass, 57.9% of the cases were diagnosed with an ovarian cyst.<sup>4</sup> The prepubertal adolescent is at risk of developing functional cysts

due to the failure of involution of follicles. Prepubertal cysts are commonly caused by gonadotropin stimulation of the ovary by the immature hypothalamic-pituitary axis. Millar, et al. found ovarian cysts in 2% - 5% of prepubertal females undergoing ultrasound. These cysts are mostly small and insignificant. The present study was conducted to evaluate ovarian cysts.

#### **MATERIALS & METHODS**

The present study was conducted among 85 cases of ovarian cysts reported in the department of Gynaecology. All patients were informed regarding the study and their consent was obtained.

Data such as name, age, etc. was recorded. A thorough clinical examination was performed in all patients. Clinical presentation, such as vaginal bleeding, abdominal pain or swelling, number of cysts, unilateral or bilateral, clear cysts or complicated, plus the location or side of the cysts and type and infertility were recorded. Results were tabulated and subjected to statistical analysis. P value less than 0.05 was considered significant.

#### **RESULTS**

**Table I Distribution of patients** 

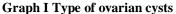
| Age group (Years) | Number | P value |
|-------------------|--------|---------|
| 20-25             | 34     | 0.05    |
| 25-30             | 30     |         |
| >30               | 21     |         |

Table I shows that age group 20-25 years had 34, 25-30 years had 30 and >30 years had 21 cases. The difference was significant (P< 0.05).

Table II Type of ovarian cysts

| Type                | Number | P value |
|---------------------|--------|---------|
| Dermoid             | 18     | 0.05    |
| Functional          | 24     |         |
| Benign cyst adenoma | 20     |         |
| Endometriosis       | 10     |         |
| Malignant           | 7      |         |
| Complicated         | 6      | 1       |

Table II, graph I shows that common type was dermoid in 18, functional in 24, benign cyst adenoma in 20, endometriosis in 10, malignant in 7 and complicated in 6 cases. The difference was significant (P< 0.05).



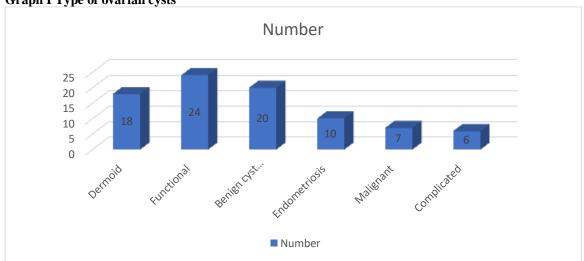
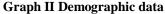
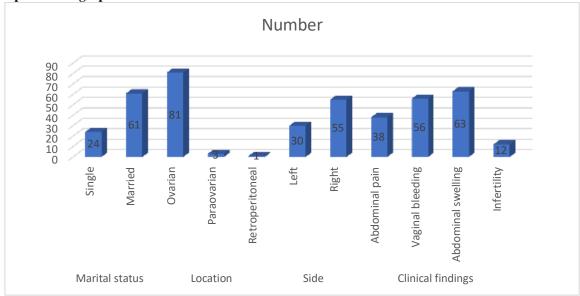


Table III Demographic data

| Parameters        | Variables          | Number | P value |
|-------------------|--------------------|--------|---------|
| Marital status    | Single             | 24     | 0.02    |
|                   | Married            | 61     |         |
| Location          | Ovarian            | 81     | 0.001   |
|                   | Paraovarian        | 3      |         |
|                   | Retroperitoneal    | 1      |         |
| Side              | Left               | 30     | 0.05    |
|                   | Right              | 55     |         |
| Clinical findings | Abdominal pain     | 38     | 0.08    |
| -                 | Vaginal bleeding   | 56     |         |
|                   | Abdominal swelling | 63     |         |
|                   | Infertility        | 12     |         |

Table III, graph II shows that patients were single (24) and married (61), type was ovarian in 81, paraovarian in 3 and retroperitoneal in 1 case, side was left in 30 and right in 55. Clinical features were abdominal pain in 38, vaginal bleeding in 56, abdominal swelling in 63 and infertility in 12 cases. The difference was significant (P< 0.05).





### **DISCUSSION**

Adnexal masses are uncommon occurrences in the adolescent population. However, when they occur, they are anxiety-provoking for both the patient and her family.<sup>6</sup> Many practitioners are unfamiliar with the proper management of these adnexal masses and are quick to proceed with surgical intervention that is often unnecessary. The estimated incidence of adnexal masses in the adolescent population is approximately 2.6 per 100,000 girls younger than 18 years of age. An estimated ten percent of pediatric ovarian masses are found to be malignant.8 Ovarian malignancies account for only one percent of all malignancies found in female patients less than 15 years of age. While the discovery of an ovarian mass in an adolescent patient is concerned, conservative management is warranted due to the fact that the majority of these tumors are benign.9 The present study was conducted to evaluate ovarian cysts.

In present study, age group 20-25 years had 34, 25-30 years had 30 and >30 years had 21 cases. Adulijabar et al<sup>10</sup> found that there were 244 cases of ovarian cysts during the study period. The age ranged from 3 months to 77 years of age. The parity from 0-6. The height range from 37-180 cm. 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 paraovarian 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%.

We found that common type was dermoid in 18, functional in 24, benign cyst adenoma in 20, endometriosis in 10, malignant in 7 and

complicated in 6 cases. A thorough history and physical should be obtained and diseases of the genitourinary and gastrointestinal tracts should be ruled out when patients present with abdominal pain or a palpable mass. It is important to discuss menstrual cycle, sexual history, and contraceptive methods to help elucidate the cause of symptoms. A pregnancy test and a complete blood count should be ordered immediately in patients who present with abdominal pain to identify the presence of pregnancy, leukocytosis, anemia, and hemorrhage. Ovarian torsion should be suspected if fever, severe pain, and leukocytosis are present. Surgical emergencies including ectopic pregnancy, appendicitis, and ovarian torsion should be managed appropriately. <sup>11</sup>

We observed that patients were single (24) and married (61), type was ovarian in 81, paraovarian in 3 and retroperitoneal in 1 case, side was left in 30 and right in 55. Clinical features were abdominal pain

in 38, vaginal bleeding in 56, abdominal swelling in 63 and infertility in 12 cases. Simple cysts greater than 3 cm should be managed conservatively with monthly ultrasounds to confirm regression. Ovarian cysts typically resolve spontaneously through 3 menstrual cycles. For postpubertal females, timing of the ultrasound during the follicular phase of the cycle immediately after the menstrual cycle will avoid confusion between a follicle, corpus luteum, and persistent cyst. Large ovarian cysts, defined as greater than 5 cm, require weekly ultrasounds. Warner, et al. successfully managed 90% of children with large ovarian cysts without surgical intervention. Hemorrhagic functional cysts may be confused with a malignant process due to its solid or complex characteristics but should regress in 2 to 8 weeks.<sup>12</sup>

#### **CONCLUSION**

Authors found that common type was dermoid, functional, benign cyst adenoma, endometriosis, malignant and complicated.

#### **REFERENCES**

- Skinner, M.A., Schlatter, M.G., Heifetz, S.A. and Grosfeld, J.L. (1993) Ovarian neoplasms in children. Archives of Surgery, 128, 849-854.
- Oltmann, S.C., Garcia, N., Barber, R., Huang, R., Hicks, B. and Fischer, A. (2010) Can we preoperatively risk stratify ovarian masses for malignancy? Journal of Pediatric Surgery, 45, 130-134.
- Cass, D.L., Hawkins, E., Brandt, M.L., Chintaqumpala, M., Bloss, R., Milewicz, A., Minifee, P., Wesson, D., Nuchtern, J. (2001) Surgery for ovarian masses in infants, children, and adolescents: 102 consecutive patients treated in a 15-year period. Journal of Pediatric Surgery, 36, 693-699.
- Grovas, A., Fremgen, A., Rauck, A., Ruyman, D., Hutchinson, C., Winchester, D. Menck, H. (1997) The national cancer data base report on patterns of childhood cancers in the United States. Cancer, 80, 2321.
- Miller, Templeman, C., Fallat, M., Blinchevsky, A. and Hertweck, S. (2000) Noninflammatory ovarian masses in girls and young women. Obstetrics & Gynecology, 96, 229-233.

- Laufer, M. and Goldstein, D. (2000) Benign and malignant ovarian masses. Pediatric and adolescent gynecology. Lippincott Williams & Wilkins, Philadelphia, 685-728.
- Millar, D., Blake, J., Stringer, D., Hara, H., Naniak, C. (1993) Prepubertal ovarian cyst formation: 5 years' experience. Obstetrics & Gynecology, 81, 434-438.
- 8. Brown, M., Hebra, A., McGeehin, J., Ross, A. (1992) Ovarian Masses in Children: A review of 91 cases of malignant and benign masses. Journal of Pediatric Surgery, 28, 930-932.
- Kanizsai, B., Orley, J., Szigetvari, I. and Doszpod, J. (1998) Ovarian cysts in children and adolescents: Their occurrence, behavior, and management. Journal of Pediatric and Adolescent Gynecology, 11, 85-88.
- Abduljabbar HS, Bukhari YA, Al Hachim EG, Ashour GS, Amer AA, Shaikhoon MM, Khojah MI. Review of 244 cases of ovarian cysts. Saudi medical journal. 2013 Jul;36(7):834.
- Hertzberg, B.S., Kliewer, M.A. and Paulson, E.K. (1999) Ovarian cyst rupture causing hemoperitoneum: Imaging features and the potential for misdiagnosis. Abdominal Imaging, 24, 304-308.
- 12. Ozcan, E.R., Kuruoglu, S. and Dervisoglu, S. (2013) Ovary-sparing surgery for teratomas in children. Pediatric Surgery International, 29, 233-237.