

ORIGINAL

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SYMPTOMATOLOGY OF FUNCTIONAL OVARIAN CYSTS



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ABSTRACT ... dr-muzamil@yahoo.com **Objective:** To study the symptomatology of functional ovarian cysts. **Study Design:** Cross-sectional, observational study. **Setting:** Outpatient Department of Gynae Unit, Jinnah Hospital, Lahore from June 2003 to December 2003. **Material & Methods:** All patients attending Gynae outpatient department Jinnah Hospital, Lahore who met the inclusion criteria were selected. Information regarding age, symptoms like abdominal pain, menstrual cycle pattern, dyspareunia, hirsutism and obesity were documented. **Results:** During the six months period fifty-seven patients were included in the study, 38 patients (66.66%) of the study population was less than 30 Yrs of age, 26 patients (45.61%) had dysmenorrhoea, 14 patients (24.56%) had menorrhagia. No other menstrual irregularities were noted. 11 patients (19.29%) presented with lower abdominal pain. 27 patients (47.36%) had body mass index of greater than 30. Acne was seen in 20 (35.08%) patients and melasma in 12 (21.05%). Hirsutism was not seen in the study population. Family history of ovarian cysts was reported in 3 patients (5.26%) only. **Conclusion:** Functional Ovarian Cysts are often asymptomatic and seen in relatively younger age group (less than 30 years). The results of this study reflected a positive association between functional ovarian cyst and obesity. Although dysmenorrhea was also seen in half of the patients of functional ovarian cysts, more studies with larger patients base are required to judge any association.

Key Words: Functional Ovarian Cysts, Symptomatology, and Polycystic ovaries

INTRODUCTION

An ovarian cyst is a fluid filled sac, similar to a blister that forms in an ovary. All women develop small ovarian cyst during menstrual cycle, when an egg

matures in a small follicle on the surface of the ovary. Normally the egg is released and the sac dissolves. If the egg is not released, the sac does not dissolve and cyst forms. The annual rate of hospitalization for functional ovarian cyst is 500/100,000 woman/year

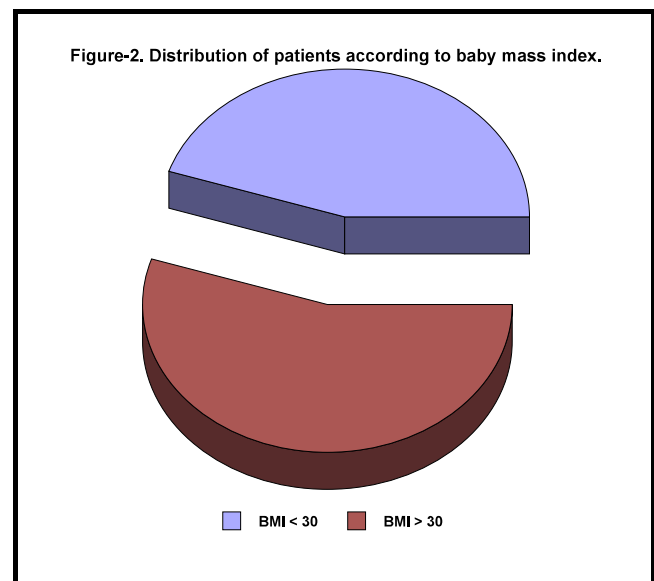
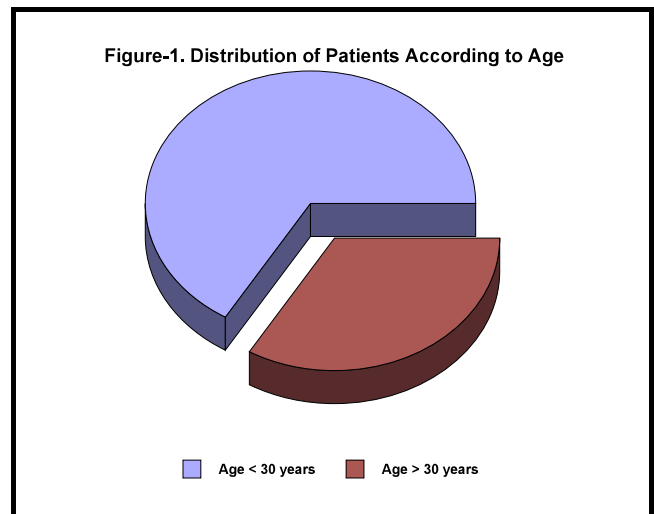
in US. There are four types of functional cysts follicular, corpus luteum, theca luteum and polycystic ovaries. Physiological cyst enlargement of the ovary may occur as a sequelae of failure of either follicular rupture or corpus leuteum regression. The latter is termed Halban’s syndrome. The formal has been associated with luteinized unruptured follicle syndrome, in which “intraovarian ovulation” is thought to occur; this is a diagnosis usually used to establish with ultrasound. In general functional cyst regress spontaneously; however, they may persist and become symptomatic. The obvious and most visible approach is observation, because most such cysts are self-limited.

The cyst, however, may prove to be a source of continued pelvic pain or may adhere to the posterior broad ligament, producing persistent symptom. The potential for adnexal torsion always exists with an ovarian cyst¹. Ovarian cyst may cause no symptoms, however if symptomatic, may cause dull ache, sense of fullness in abdomen, dyspareunia, delayed irregular or painful periods, hirsutism and obesity. Pain or pressure is caused by a number of factors such as bleeding, bursting of cyst which irritates the abdominal tissue or torsion or cyst which can block the blood flow to the cyst. Women who have undergone tubal sterilization were substantially more likely to have functional ovarian cysts (odd ratio OR 1–70)². Most of symptomatic functional ovarian cysts are treated by surgery. Oral contraceptives and ultrasound guided puncture are not more efficient than expectant management for treating asymptomatic functional ovarian cysts in non-menopausal women³.

PATIENTS & METHODS

All patients attending Gynae outpatient department Jinnah Hospital, Lahore who met the inclusion criteria were selected. The time period of this study was June 2003 to December 2003. Information regarding age, symptoms like abdominal pain, menstrual cycle pattern, dyspareunia. hirsutism, obesity were documented. Patients with Ovarian Cyst with thin walls, size less than 6 cm, clear contents and absence of debris or solid contents on

ultrasound were included in the study. No Enhancement of Blood volume on Doppler study. All Pregnant patients, prepubertal patients, postmenopausal patients, and failed to provide consent were excluded from the study.



RESULTS

During the six months period fifty-seven patients were included in the study, 38 patients (66.66%) of

the study population was less than 30 Yrs of age. 26 patients (45.61%) had dysmenorrhoea, 14 patients (24.56%) had menorrhagia.

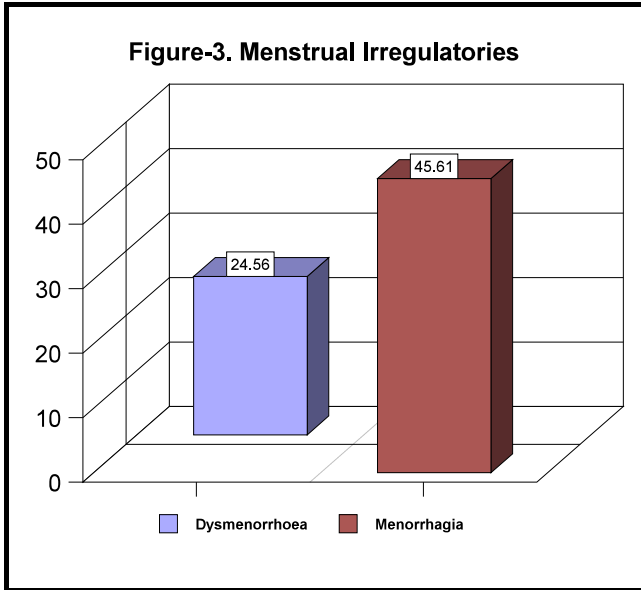


Table: I Symptomatology of Functional Ovarian Cysts(n=57)

Symptomatology	Number	Percentage
Dysmenorrhoea	26	45.61
Menorrhagia	14	24.56
Obesity	27	47.36
Acne	20	35.08
Melasma	12	21.05
Pain in Lower Abdomen	11	19.29
Hirsutism	-	-

No other menstrual irregularities were noted. 11 patients (19.29%) presented with lower abdominal pain. only 27 patients (47.36%) had body mass index of greater than 30. Acne was seen in 20 (35.08%) patients and melasma in 12 (21.05%). Hirsutism was not seen in the study population. Family history of

ovarian cysts was reported in 3 patients (5.26%) only.

DISCUSSION

Annual rate of hospitalization for functional ovarian cyst has been estimated to be as high as 500/1000 women/year in the United States although little is known about the edpidemiology of the condition. Functional ovarian cysts typically disappear within 60 days without any treatment. Oral contraceptive pills may be prescribed to help establish normal menstrual cycle and decrease the development of functional ovarian cysts. The functional cysts are common among adolescent. Functional ovarian cysts may occur in pre-menopausal women. They are most common in young women and this is consistent to our study. Although, many cysts are detected at routine physical examination, patients may be seen with acute or chronic pelvic pain, dysfunctional uterine bleeding and pelvic mass⁵. In one study, the common ovarian masses detected were germ cell tumors (27.5%) and functional cysts (25%)⁴.

In our study, 27 patients (47.36%) had body mass index more than thirty. In a series of 1741 women with polycystic ovaries in a study by Balen et al (1995) only 38.4% of patients were overweight (BMI > 25kg/m²). Approximately 30% of the patients had a regular menstrual cycle, 50% has oligomenorrhae and 20% amenorrhae⁶. It reflects a positive association between functional ovarian cysts and obesity like our study.

Polycystic ovaries without hormonal abnormalities have also been reported in patients with menstrual irregularities and inability to conceive⁷. Follicular cysts are usually asymptomatic, diagnosed incidentally on routine examination or ultrasound examination. Follicular cysts are associated with ovulation induction and trophoblastic disease⁸. Out of 57 patients, 26 patients (45.61%) had Dysmenorrhae and 14 patients (24.56%) had menorrhagia. No other menstrual irregularities were noted.

Leuteal cysts less common than follicular cysts, these are more likely to present as a results of intraperitoneal bleeding and this is more common on

the right side⁹. Eleven patients (19.29%) presented with lower abdominal pain. Out of these ten patients presented with dull ache and one with acute abdomen for which she had laparotomy and operative findings were ruptured corpus leuteum cyst. In several series of laparoscopic management of ovarian cyst, a simple follicular or leuteum cyst was identified in most patients evaluated for pelvic pain. In a series by Kleppinger, 31 out of 64 ovarian cysts were noted to fall into this category. Similar findings were reported by Larsen and associates and Hassan^{10,11,12}. Out of 57 patients polycystic ovarian disease was seen only in ten patients (17.54%). Prevalence of polycystic ovaries in normal adult woman is approximately 20%^{13,14}.

CONCLUSION

Functional Ovarian Cysts are often asymptomatic and seen in relatively younger age group (less than 30 years). The results of this study reflected a positive association between functional ovarian cyst and obesity. Although dysmenorrhea was also seen in half of the patients of functional ovarian cysts, more studies with larger patients base are required to judge any association.

REFERENCES

1. John A Rock, John D Thomson. **Surgery for benign disease of the ovary**. T Linde's Gynaecology Vol 1. 1997; 8: 635.
2. Holt VL, Cushing Haugen KL, Daling JR. **Oral contraceptives, tubal sterilization and functional ovarian cyst risk**. Obstet Gynaecol 2003; 102: 252–258.
3. Brun JL, Le Tonze O, Leng JJ. **Medical and Surgical treatment of functional ovarian cysts**. J Gynaecol Obstet Biol Reprod (Paris) Nov2001; 30 Suppl I: 541–52.
4. Skiadas VT, Koutoulidis V, et al. **Ovarian masses in young adolescents: Imaging findings with surgical confirmation**. Eur J Gynaecol Oncol. 2004; 25(2): 201–6.
5. (Robert W Shaw, W Patrick Soutter, Stuart L, Stanton. **Benign Tumors of the Ovary**: Shaw's Gynaecology 3rd Ed. 2003; 3: 665) (Thornton KL, Decherney AH. laparoscopic management of ovarian cysts and endocrinologist view. Yale J Biol Med. 1991; 64: 599–606.
6. Balen AH, Conway GS, Kaltsas G, Techatraisak K, Manning PJ, Wst C, Jacobs HS. **Polycystic ovaries syndrome: The spectrum of the disorder in 1741 patients**. Hum Reprod. 1995; 10: 2075–12.
7. Moi Y, Terado H, Toda T, Harad T, Tanikawa M, Terakawa N. **Transvaginal ultrasound guided: Follicular aspiration in the management of anovulatory infertility associated with polycystic ovaries**. Fertil Steril 1991; 56: 1060–1065.
8. Robert W Shaw, W Patrick Soutter, Stuart L, Stanton. **Benign Tumors of the Ovary**: Shaw's Gynaecology 3rd Ed. 2003; 3: 665–666.
9. Robert W Shaw, W Patrick Soutter, Stuart L, Stanton. **Benign Tumors of the Ovary**: Shaw's Gynaecology 3rd Ed. 2003; 3: 666.
10. Kleppinger RK. **Ovarian cyst fenestration by a laparoscopic**, J reprod Med 1978; 21: 16.
11. Hassan HM. **Laparoscopic management for ovarian cysts**, J Reprod Med 1990; 35: 863.
12. Larsen JF, Pederson OD, Gregersen E. **Ovarian cyst fenestration via the laparoscope**. Acta Obstet Gynaecol Scand 1986; 65: 539.
13. Clayton et al. **How common are polysystic ovaries in normal woman and what is their significance for the fertility of the populations**. Clin Endocrinol. 1992; 37: 127–34.
14. Farquhar CM, Birdsall M, Manning P, Michel JM. **Transabdominal verses transvaginal ultrasound in the diagnosis of polycystic ovaries on ultrasound scanning in a population of randomly selected women**. ultrasound Obete Gynaecol. 1994; 4: 54–9.