

Frequency and Presentation of Adnexal Masses

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ABSTRACT

Background: Ovarian masses are the most common form of adnexal masses, which in many cases are asymptomatic so remain undiagnosed for a long period.

Aim: To study the frequency of presenting symptoms in women having adnexal masses.

Settings and duration of study: This study was conducted at the Department of Obstetrics & Gynaecology, Unit-I, Jinnah Hospital, Lahore for a period of 6 months (11th September 2009 to 10th March, 2010).

Sample size and type: Sample size of 170 cases was calculated with 95% confidence level. It was a cross sectional study using non-probability sample.

Results: The mean age of the patients was 34.28 with 7.87 S.D and 137(80.59%) were married. In 96(56.47%) patients, the size of the cyst was <5cm, while it was 5-8cm in 63(37.06%) cases and in only 11(6.47%) the size was >8cm. Abdominal pain was found in 43(25.29%), abdominal distension in 22(12.94%), menorrhagia in 36(21.18%) and the most frequent symptoms of dysmenorrhea was found in 69(40.59%).

Conclusion: Menorrhagia, dysmenorrhea and abdominal pain are found to be the most frequent symptoms for adnexal masses.

Keywords: Adnexal masses, symptoms, frequency, abdominal pain, abdominal distension

INTRODUCTION

An adnexal mass is as an enlarged structure in the uterine adnexa which can either be palpated on a bimanual pelvic examination or visualized using radiographic imaging.

Adnexal masses in adolescence are common in gynecologic practice. The clinical presentation of an adnexal mass can be variable, but patients are often asymptomatic until they have been subjected to rupture or torsion. Usual symptoms include menstrual abnormalities and a sensation of pelvic irritation in some cases, especially in adolescent girls¹. Pelvic pain is the most common gynaecologic symptom among adolescent girls with an adnexal mass and the leading indication for hospitalization.

Women who have symptoms may also note urinary frequency, pelvic or abdominal pressure, and bowel habit changes due to the mass effect on these organs. Girls younger than 10 years frequently present with pain, as do older women who have infected masses or endometriosis. Adnexal torsion often presents with acute abdominal pain, requiring urgent surgical intervention.

The initial detection and evaluation of an adnexal requires a high index of suspicion, a thorough history and physical examination, and careful attention to subtle historical clues.

Identification of early symptoms is important because 5 years survival for early stage disease is 70%-90% compared with 20%-30% for advance stage disease. So more severe and frequent symptoms warrant further diagnostic investigations because they are more likely to be associated with the both benign and malignant ovarian masses².

Adolescent girls are subject to the same variety of adnexal masses as older reproductive women, including uterine, ovarian, tubal, and extragential masses. Deciding which patient needs surgical exploration can best be done by considering the differential diagnosis and clinical characteristics of adnexal mass. The reported prevalence varies widely depending upon the population studied and the criteria employed. In a random sample of 335 asymptomatic women aged 25 to 40 years, the point prevalence of an adnexal lesion on ultrasound examination was 7.8% (prevalence of ovarian cysts 6.6%)³. In another series, transvaginal ultrasonography was performed on 8794 asymptomatic postmenopausal women as part of their routine gynecological check-up and 2.5% had a simple unilocular adnexal cyst⁴.

This study was conducted with the view to determine the frequency of presenting symptoms by which women having adnexal mass present so that advancement of the disease may be avoided.

The objective of the study was to study the frequency of presenting symptoms in women having adnexal masses.

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MATERIAL & METHODS

This Cross sectional study was conducted at the Department of Obstetrics & Gynaecology, for a period of 6 months in unit-I, Jinnah Hospital, Lahore. Sample size of 170 cases was calculated with 95% confidence level, by using purposive non-probability sample. Patient between age of 13 to 45 years having adnexal mass confirmed on pelvic ultrasound presenting with signs and symptoms were included in the study. Patients previously operated for pregnancy were excluded from the study. The cases fulfilling the inclusion criteria were collected from OPD and ward. An informed consent was obtained for subjecting them to the study and using their data in research. The demographic information like name, age, location, was obtained. The history of present illness was explored for type of symptoms including lower abdominal pain, abdominal distention, (increasing abdominal size) menorrhagia and dysmenorrhoea. This information was recorded on a specifically designed proforma.

It was computer based. SPSS version-10 was used. Quantitative variables of my study were age & tumor size. These variables were presented as mean + s.d. Qualitative variables were symptoms including lower abdominal pain, abdominal distention (increasing abdominal size), menorrhagia and dysmenorrhoea.

RESULTS

A total of 170 patients were enrolled in this study. Majority of the patients 77(45.29%) were of age group between 21-30 years, 59(34.71%) with age 31-40 years, 23(13.53%) between 13-20 years and 11(6.47%), patients of 41-45 years. The mean age was recorded as 34.28 with 7.87 S.D (Table1). As regards to marital status of the subjects, 137(80.59%) were married and 33(19.41%) were found un-married (Table 2).

Analysis of the size of tumor is prosecuted in table 3. In 96(56.47%) patients, the size was <5cm, while 63(37.06%) cases were found with mass of 5-8cm and in only 11(6.47%) the size was >8cm.

As evident by table 4, we recorded the frequency of different symptoms of present illness. Abdominal pain was evident in 43(25.29%), abdominal distension in 22(12.94%), menorrhagia in 36(21.18%) and the most frequent symptoms of dysmenorrhoea was found in 69(40.59%).

Table 1: Age distribution (n=170)

Age (years)	n	%age
13-20	23	13.53
21-30	77	45.29
31-40	59	34.71
41-45	11	6.47
Mean & S.D.	34.28+7.87	

Table 2: Marital status(n=170)

Marital Status	n	%age
Married	137	80.59
Un-married	33	19.41

Table 3: Size of tumor(n=170)

Size of tumor	n	%age
<5cm	96	56.47
5-8cm	63	37.06
>8cm	11	6.47

Table 4: Presenting complaints(n=170)

Present illness	n	%age
Abdominal pain	43	25.29
Abdominal distension	22	12.94
Menorrhagia	36	21.18
Dysmenorrhoea	69	40.59

DISCUSSION

To estimate the incidence and distribution of adnexal masses in the adolescent population is difficult because of the rarity of the condition and because most adnexal cysts develop and resolve without clinical detection. When assessing the clinical significance of an adnexal mass, considering several age groups is important. That is why in our study, we enrolled patients of different age groups.

In studies of adnexal masses detected by sonography, non-neoplastic lesions accounted for the majority of adnexal masses in adolescents range from 75% to 98%. Adolescents make up a very small fraction of women with ovarian masses (approximately 6%)⁵ and an even smaller fraction of women with ovarian cancer⁶. It is, however, the most common genital tract malignancy in adolescents. According to Hilger 80% of masses in women less than 55 years are benign and that only 0.4% is carcinomas⁷.

Adnexal masses present a diagnostic dilemma; the differential diagnosis is extensive, with most masses representing benign processes^{8,9}. However, without histopathologic tissue diagnosis, a definitive diagnosis is generally precluded. Physicians must evaluate the likelihood of a pathologic process using clinical and radiologic information and balance the risk of surgical intervention for a benign versus malignant process.

Adolescents with adnexal masses are often diagnosed because they present with symptoms. In our series, we found 80.59% married and only 19.41% un-married patients; regarding symptoms, we found abdominal pain in 43(25.29%), abdominal distension in 22(12.94%), menorrhagia in 36(21.18%) and dysmenorrhea in 40.59%.

Different retrospective studies are in agreement with our study in some aspects showing 45.61% dysmenorrhea and menorrhagia in 24.56% but there is a difference in results of lower abdominal pain (19.29%), and abdominal distension (31.74%). In comparison to this, our study shows abdominal pain in 25.29% and abdominal distension in 12.94%.

Reason to this variation is that, most of the women presented to us were those having tumors of less than 8cm in size which infrequently produce abdominal distension and tumor more than 8 cm were only 6.47%. While a recent retrospective cohort study shows Abdominal pain 45% being the most common initial symptom and was more frequent while menstrual problems were the second most common initial symptom 20.9% followed by incidental detection.

Van Winter JT in his series of 486 patients, found abdominal pain to be the most common complaint i.e., 56%¹⁰ which is consistent with findings from other studies. In patients with adnexal masses, 55% to 80% have palpable lesions on examination^{11,12}. Other less common findings and complaints include distension in 8% to 24%, gastrointestinal problems in 7% to 40%, urinary complaints in 3% to 18%, and endocrine abnormalities in 3% to 25%^{13,14}. In adolescents, endocrinologically active masses may cause abnormal uterine bleeding, amenorrhea, or virilization.

Though, sonography has proven to be a rapid, effective, noninvasive method to identify and visualize normal and pathologic conditions in the pelvis and decreased the need for pelvic examinations with patients under general anesthesia in the evaluation of pelvic pathology but these symptoms may also be helpful for timely and accurate diagnosis of adnexal masses.

Women sometimes ignore these minor symptoms like dysmenorrhea, abdominal pain, menorrhagia and abdominal distension and present to us in late stages of ovarian carcinoma so while managing adnexal masses, it is important to know

the frequency of the symptoms so that those symptoms may be dealt accordingly well in time.

CONCLUSION

Menorrhagia, dysmenorrhea and abdominal pain are found to be the most frequent symptoms for adnexal masses.

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