

Original Article

Presenting Complaints of the Patients with Adnexal Mass Attending Bangabandhu Sheikh Mujib Medical University

DOI: dx.doi.org

Sultana Rajia¹, Khairun Nahar², Sufia Khatun³, Maksudur Rahman⁴

Received: 01 OCT 2022

Accepted: 10 OCT 2022

Published: 14 NOV 2022

Published by:

Sheikh Sayera Khatun Medical College, Gopalganj, Bangladesh



This article is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

ABSTRACT

Introduction: Adnexal masses are one of the leading causes of mortality and morbidity. Adnexal masses may result from benign or malignant lesions of ovarian, tubal, and para tubal origin, as well as pregnancy-related causes such as ectopic pregnancy. The study intends to identify complaints among patients with adnexal mass admitted to Bangabandhu Sheikh Mujib Medical University from March 2016 to August 2016. **Methods:** This cross-sectional study was carried out at Bangabandhu Sheikh Mujib Medical University, Dhaka. The sample was

collected by the purposive consecutive sampling method. Subjects were selected by appropriate inclusion criteria. Data were collected after appropriate verbal consent from the guardian of patients and the result was subjected to standard statistical evaluation and was analyzed by the SPSS programme. **Result:** This study shows the average age was 27.82 years. Regarding parity majority (31,62.0%) were nulliparous women and the majority (31,62.0%) were from a lower-middle-class families. The primary complaints in the study group (27,54.0%) were dysmenorrhoea followed by infertility (21,42%). Eighteen women (18,36.0%) complained of dyspareunia. Twenty-six patients (26,52.0%) had tender mass. Size of the uterus, twenty-two (22, 44%) patients had an enlarged uterus. Cul-de-sac, was free to about half of the study population (24,48.0%), was obliterated in twenty-two patients (22,44.0%) and nodularity was present in four patients (4,8.0%). **Conclusion:** This research looked at complaints from patients who had adnexal masses. Adnexal masses are prevalent in gynecologic practice and may create diagnostic and treatment problems.

1. Assistant Professor, Department of Obstetrics and Gynaecology, President Abdul Hamid Medical College Hospital, Kishoregang, Bangladesh
2. Associate Professor, Department of Obstetrics and Gynaecology, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh
3. Professor, Head of Department of Obstetrics and Gynaecology, President Abdul Hamid Medical College Hospital, Kishoregang, Bangladesh
4. RMO, Sadar Hospital Department of Kishoregang, Bangladesh

Keywords: Adnexal Mass, Uterus, Ovary etc.

(The Insight 2022; 5(1): 172-179)

INTRODUCTION

Adnexal masses are growths of cells that develop organs and connective tissues around the uterus. Adnexal tumours are generally not cancerous, however in some cases; they can be cancerous. Many adnexal masses get away, however, few need treatment. Adnexal masses are widespread in gynecologic practice and are frequently seen in both diagnostic and management trials, particularly in women of reproductive age [1]. Clinical examination or USG examinations of the pelvis for symptoms are possible ways of identifying adnexal mass. These adnexal masses can be functional cysts to malignant masses like ovarian cancer which can also be caused by pelvic infection. [2] [3]. The gynecologic causes of adnexal masses include benign sources, such as luteal cysts, polycystic ovaries, ectopic pregnancies, and tubo-ovarian masses[4]. Because adnexal masses might have a gastrointestinal tract or other abdominal or pelvic organs on imaging or examination, malignant causes include endothelium carcinoma, sarcoma, and borderline tumors, and breast and colon can metastasis in ovaries [5]. Women who underwent the fertility treatments had lesions, such as; simple cysts, leiomyoma, hemorrhagic cysts, and hyper-stimulated ovaries. An adnexal mass related to pain comprises ovarian torsion and ectopic pregnancy. Adnexal mass is not rare during pregnancy and the prevalence of adnexal masses in pregnancy ranges from 2% to 10% [6] [7]. The complete occurrence of malignancy in an adnexal mass noted in

pregnancy is 1-8%. Those who continue into the second trimester, on the other hand, are at danger of torsion, rupture, or labor blockage [8] [9] [10]. Ovarian masses are detected nearly 22,000 times per year in the United States and making it the second leading gynecologic cancer and approximately 14,000 women died of ovarian cancer in 2010 [11] [12]. Screening for an ovarian mass has not been established to be operative in the general population. If there are no effective screening measures obtainable, 70% of ovarian masses are diagnosed at the late stage. However, when adnexal mass is diagnosed at a stage confined to the ovary, survival rates can reach 90% [13]. Laparoscopy displays higher diagnostic accuracy, especially in endometriomas and it appears to be safe and precise with low morbidity [14]. On the contrary, because it is easily available and non-invasive, ultrasonography should be the first imaging modality used to detect and portray adnexal masses [15]. Although bimanual examination of the adnexal masses may not allow a very specific diagnosis, clinically beneficial information can often be obtained and hence it is mainly suitable as a foremost step in the assessment of adnexal masses and as an adjunct to morphological assessment of ovarian masses [16]. The study aims to evaluate the complaints of patients with an adnexal mass.

OBJECTIVES

General objective:

To evaluate the complaints of patients with an adnexal mass.

Specific Objective:

To observe the incidence of adnexal mass in different ages.

To detect the clinical presentation of adnexal mass.

METHODS

A prospective comparative study was carried out in the Department of Obstetrics and Gynaecology, Bangabandhu Sheikh Mujib Medical University, Dhaka from March 2016 to August 2016. A total of 50 patients (N=50) enrolled in this study following the inclusive criteria. All the physical and biochemical parameters were recorded in the data sheet. Verbal consent was taken before recruiting the study population. Ethical clearance was taken from each of the patients. The respondents were remain entirely free to withdraw their participation at any stage or at any time of the study. The information was kept confidential only to be used for the study purpose.

Inclusion criteria:

Patients with clinically suspected, ultrasound detected adnexal mass.

Exclusion Criteria:

Patients active genital infection

Patients with cardiac or pulmonary disease, coagulopathy, and multiple abdominal surgeries.

Patients who showed unwillingness to participate in the study

Data analysis:

The study coordinators performed random checks to verify data collection processes. Completed data forms were reviewed, edited, and processed for computer data entry. Frequencies,

percentages, and cross-tabulations were used for descriptive analysis. The data analysis was performed using Statistical Package for the Social Sciences (SPSS) for Windows Version.

RESULT

Among the study population (N=50), the mean age of the patients was 27.82 ± 5.37 , the majority of the patients' (17,34.0%) age ranged from twenty-six to thirty and only four patients (4,8.0%) age was more than forty. Around three-fourths of the study population (36,72.0%) were married and regarding parity, most of the patients (31,62.0%) were nulliparous, and around three-fifths of the study population (31,62.0%) came from lower economic class [Table 1]. The primary complaints in more than half of the study population (27,54.0%) were dysmenorrhea, around two-fifth of the patients (21,42%) had infertility and fourteen patients (14,28.0%) had abnormal uterine bleeding [Table 2]. About half of the study population (26,52.0%) experienced tender mass, based on the relationship of mass with the uterus, around three-fifths of the patients (30,60.0%) had uterus fixed. According to uterus size, the majority of the patients' (30,60.0%) uterus was normal and twenty-two patients (22,44.0%) uterus was enlarged in size. Cul-de-sac, was free to about half of the study population (24,48.0%), was obliterated in twenty-two patients (22,44.0%) and nodularity was present in four patients (4,8.0%) [Table 3].

Table 1: Distribution of study population based on Socio-demographic characteristics (N=50)

Characteristics	(N,%)
Age Mean age: 27.82±5.37	
≤20	4,8.0%
21-25	10,20.0%
26-30	17,34.0%
31-35	9,18.0%
36-40	5,10.0%
>40	4,8%
Marital status	
Unmarried	14,28.0%
Married	36,72.0%
Parity	
Nulliparity	31,62.0%
1-2	11,22.0%
>2	8,16.0%
Socio-economic status	
Lower class >7000	17,34.0%
Lower middle class 7000-27000	31,62%
Upper middle class >27000	2,4%

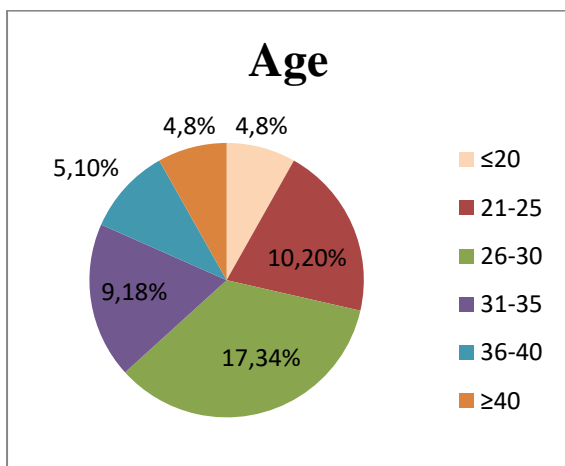


Figure 1: Pie chart showing the Age of the patients.

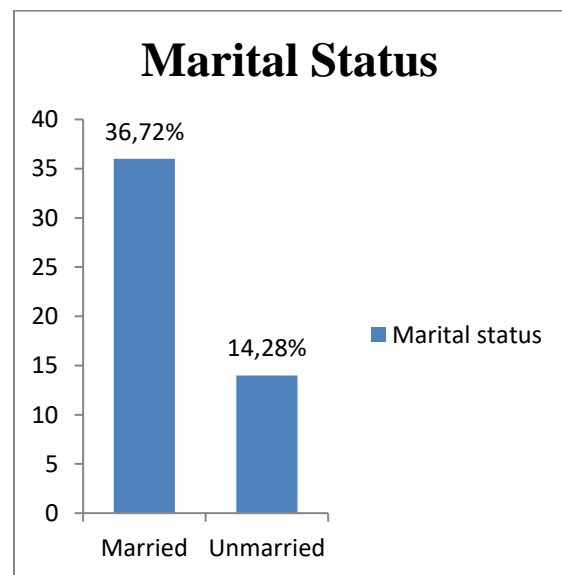
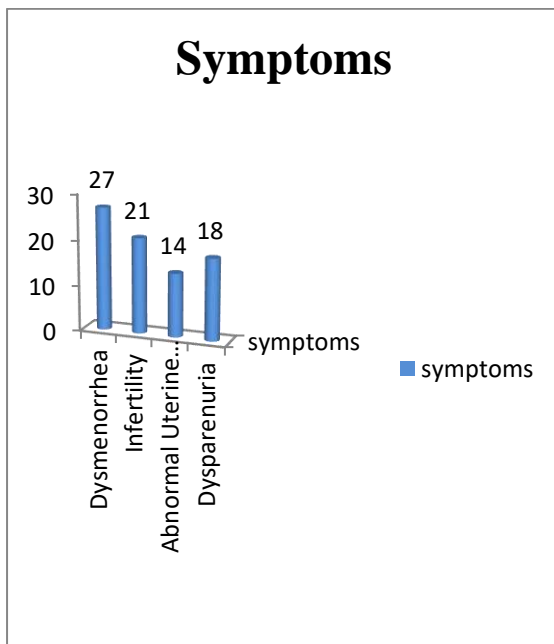


Figure 2: Column graph showing the Marital status of the patients.

Table 2: Distribution of study population based on presenting symptoms (N=50)

Symptoms	(N,%)
Dysmenorrhea	27,54.0%
Dyspareunia	18,36.0%
Pelvic pain	16,32.0%
Infertility	21,42.0%
Primary	5,10.0%
Secondary	16,32.0%
Abnormal uterine bleeding	14,28.0%
Backache	10,20
Discharge per vaginum	9,18.0%
Lump abdomen	2,4.0%

**Figure 3: Column chart showing Symptoms of the study population.****Table 3: Distribution of study population based on Bimanual examinations (N=50)**

Clinical Findings	(N,%)
Mass	

Tender	26,52.0%
Non-tender	24,48.0%
Relationship of mass with uterus	
Fixed	30,60%
Free	20,40.0%
Size of uterus	
Normal	28,54.0%
Enlarged	22,44.0%
Cul De Sac	
Free	24,48.0%
Obliterated	22,44.0%
Nodularity	4,8.0%

DISCUSSION

In a cross-sectional study participated by fifty people who had adnexal masses were admitted to a tertiary care hospital. The laparoscopic process is advantageous and suitable for women with benign adnexal masses. There are some benefits of laparoscopic supervision of adnexal masses such as lessening of operative blood loss, rarer postoperative complications, less pain and quick recovery [17]. Most specialists rely on that laparoscopy has the potential to examine entirely and efficaciously both benign and malignant adnexal masses and reduced pointless morbidity [18]. In this current study, the majority of the patients' age was between 26-30 and the mean age was 27.82 ± 5.37 . A comparable study conducted in Haryana, India found that most of the patients belonged to the age group of 30 to 35 years of age who underwent surgery for adnexal masses [19]. A similar study was carried out and conducted with some pregnant women ages ranging from 21-47 [20]. Another analysis was conducted in Lahore and

found that the mean age of the patients was 35 years [21]. An opposing study was conducted with adolescents, aged 18 years or younger with benign ovarian masses who experienced surgery [22]. A study was also carried out with adolescents where the mean age was $13.5 \pm SD$ and experienced surgical treatment for adnexal masses [23]. In our study, the majority of the patients (31,62.0%) belonged to the lower middle class. Another similar study was conducted in a tertiary care hospital in Dhaka, enlightening that 56% of patients were from the middle class and only 4% of patients belonged to the upper-class [24]. In another analysis conducted in Malaysia, the author stated that the majority of women came from lower-middle-class families. [25]. In our study, the author showed some symptoms, such as; dysmenorrhea (27,54.0%), pelvic pain (16,32.0%), infertility (21,42.0%), abnormal uterine bleeding (14,28.0%) etc. Another study revealed almost similar symptoms, like lower abdominal or pelvic pain, abnormal uterine bleeding, dysmenorrhea, vaginal discharge, fever and vomiting etc [26]. In another article, the author found that about 92% of patients with the adnexal mass present with abdominal pain as a chief complaint [27]. An analysis was carried out in America and showed some specific symptoms, such as increased abdominal size, bloating, urinary tract syndrome, abdominal pain, pelvic pain, constipation, diarrhoea, nausea, and menstrual irregularity [28]. Based on the bimanual examination, half of the patients (26,52.0%) had tender mass, twenty-two patients (22,44.0%) had enlarged uterus, and cul-de-sac was

obliterated in twenty-two patients (22,44.0%). In another study, the author described that uterine tenderness was found in 52% of patients, the cervical motion of tenderness was found in 82% of patients and uterus size was 12 cm or less [29]. Another analysis found that the majority of masses (42%) were dermoid cysts and one patient had a tumour of low malignant potential [30]. Adnexal masses can be detected by both ultrasonography and laparoscopic surgery. Early detection and characterization of ovarian mass are of utmost benefit for enough management. The survival rates can be considerably improved with prior diagnosis and in that case, ultrasonography is a good low-cost imaging modality, of easy accessibility but can be subjective in comparison with laparoscopic surgery [31]. Government with some different NGOs can play an essential role to create awareness among women with an adnexal mass.

CONCLUSION

The exactness of the clinical review is short in the presence of neutral physical signs and symptoms. Ultrasonography can be of capable value in the evaluation of pelvic adnexal masses. It also initiates the definitive diagnosis and management to be done in the same session and therefore it can be proposed as the utmost diagnostic modality for the assessment of patients with pelvic adnexal masses.

RECOMMENDATIONS

There is a prerequisite to set a screening docket to cover all age groups for prior detection and treatment of adnexal mass

cases. Furthermore, approaches should be executed to accelerate Government programs to raise perception among people. Outdoor physical activities should be emphasized. The problem of long-term morbidity due to adnexal masses should be put to the sign of the fretful authorities. To get robust data, multicenter studies are in great need of policymakers to interpret the demonstrable scenario and to take vital procedures towards modifying this problem. Further research is also desired to detect the burden of adnexal masses which can be cancerous in an attempt to lessen the difficulties and ease the prognosis of such condition.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCE

- Liu JH, Zanotti KM. Management of the adnexal mass. *Obstetrics & Gynecology*. 2011 Jun 1;117(6):1413-28.
- Biggs WS, Marks ST. Diagnosis and management of adnexal masses. *American family physician*. 2016 Apr 15;93(8):676-81.
- Schmeler K, Mayo-Smith W, Peipert J, Weitzen S, Manuel M, Gordinier M. Adnexal masses in pregnancy: surgery compared with observation. *Obstet Gynecol*. 2005; 105:1098-103.
- Bromley B, Benacerraf B. Adnexal masses in pregnancy: accuracy of sonographic diagnosis and outcome. *J Ultrasound Med*. 1997;46:401-06.
- Agency for Healthcare Research and Quality. Evidence report/ technology assessment. Management of adnexal mass. Rockville, Md. February 2006. <http://archive.ahrq.gov/downloads/pub/evidence/pdf/adnexal/adnexal.pdf>. Accessed June, 2022
- Schwartz N, Timor-Tritsch IE, Wang E. Adnexal masses in pregnancy. *Clin Obstet Gynecol*. 2009;52:570-85.
- Leiserowitz G. Managing ovarian masses during pregnancy. *Obstet Gynecol Surv*. 2006;61:463-70.
- Ackerman SJ, Irshad A, Anis M. Ultrasound for pelvic pain II: non-gynecologic causes. *Obstetrics and Gynecology Clinics*. 2011 Mar 1;38(1):69-83.
- Munro MG, Gomel V. *Reconstructive and Reproductive Surgery in Gynecology: Volume Two: Gynecological Surgery*. CRC Press; 2018 Sep 3.
- Dupuis CS, Kim YH. Ultrasonography of adnexal causes of acute pelvic pain in premenopausal non-pregnant women. *Ultrasonography*. 2015 Oct;34(4):258.
- American College of Obstetricians and Gynecologists Committee on Gynecologic Practice. Committee Opinion No. 477: the role of the obstetrician-gynecologist in the early detection of epithelial ovarian cancer. *Obstet Gynecol*. 2011;117(3):742-746.
- Suh-Burgmann E, Hung YY, Kinney W. Outcomes from ultrasound follow-up of small complex adnexal masses in women over 50. *Am J Obstet Gynecol*. 2014;211(6):623.e1-623.e7.
- Goff BA, Mandel LS, Drescher CW, et al. Development of an ovarian cancer symptom index: possibilities for earlier detection. *Cancer*. 2007;109(2):221-227.
- Theodoridis TD, Zepiridis L, Mikos T, Grimbizis GF, Dinas K, Athanasiadis A, Bontis JN. Comparison of diagnostic accuracy of transvaginal ultrasound with laparoscopy in the management of patients with adnexal masses. *Archives of gynecology and obstetrics*. 2009 Nov;280(5):767-73.
- Sarbhavi V, Yadav M. Diagnostic accuracy of ultrasonography with laparoscopy for assessment of benign adnexal masses. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*. 2020 Jan 1;9(1):284.
- Ebell MH, Culp M, Lastinger K, Dasigi T. A systematic review of the bimanual examination as a test for ovarian cancer.

- American journal of preventive medicine.* 2015 Mar 1;48(3):350-6.
17. Solanki H, Dave P, Jindal D. Ovarian masses under 35 years of age: Sociodemographic, clinical findings and fertility preservation surgery. *Age.*;10(14):6.
 18. Berger-Chen S, Herzog TJ, Lewin SN, Burke WM, Neugut AI, Hershman DL, Wright JD. Access to conservative surgical therapy for adolescents with benign ovarian masses. *Obstetrics & Gynecology.* 2012 Feb 1;119(2):270-5.
 19. Xac MC, Jetelina KK, Jarin J, Wilson E. Benign, borderline, and malignant pediatric adnexal masses: A 10-year review. *Journal of pediatric and adolescent gynaecology.* 2021 Aug 1;34(4):454-61.
 20. Hoover K, Jenkins TR. Evaluation and management of adnexal mass in pregnancy. *American journal of obstetrics and gynaecology.* 2011 Aug 1;205(2):97-102.
 21. Ashraf A, Shaikh AS, Ishfaq A, Akram AB, Kamal F, Ahmad NA. The relative frequency and histopathological pattern of ovarian masses. *Biomedica.* 2012 Jan;28(1):98-102.
 22. Dhar SR, Begum SN, Zabin F, Akter S. Socio-demographic Characteristics of Ovarian Tumor Patients attended at a tertiary Care Hospital in Dhaka city. *Journal of Current and Advance Medical Research.* 2015 Sep 4;2(2):39-41.
 23. Givens V, Mitchell G, Harraway-Smith C, Reddy A, Maness DL. Diagnosis and management of adnexal masses. *American family physician.* 2009 Oct 15;80(8):815-20.
 24. Purnichescu V, Cheret-Benoist A, Von Theobald P, Mayaud A, Herlicoviez M, Dreyfus M. Laparoscopic management of pelvic mass in pregnancy. *J Gynecol Obstet Biol Reprod (Paris).* 2006;35(4):388-95.
 25. Idris RI, Ghani RA, Azhar TN. A KNOWLEDGE AND PERCEPTION ON OVARIAN CYST AMONG WOMEN IN KUANTAN, PAHANG MALAYSIA. *International Journal of Social Science Research.* 2021 Mar 2;3(1):45-54.
 26. Fatum M, Rojansky N. Laparoscopic surgery during pregnancy. *Obstet Gynecol Surv.* 2001;56(1):50-9.
 27. Bhagde AD, Jani SK, Patel MS, Shah SR. An analytical study of 50 women presenting with an adnexal mass. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology.* 2017 Jan 1;6(1):262-6
 28. Biggs WS, Marks ST. Diagnosis and management of adnexal masses. *American family physician.* 2016 Apr 15;93(8):676-81.
 29. Close RJ, Sachs CJ, Dyne PL. Reliability of bimanual pelvic examinations performed in emergency departments. *Western journal of medicine.* 2001 Oct;175(4):240.
 30. Schmeler KM, Mayo-Smith WW, Peipert JF, Weitzen S, Manuel MD, Gordinier ME. Adnexal masses in pregnancy: surgery compared with observation. *Obstetrics & Gynecology.* 2005 May 1;105(5):1098-103.
 31. Vázquez-Manjarrez SE, Rico-Rodríguez OC, Guzman-Martinez N, Espinoza-Cruz V, Lara-Nuñez D. Imaging and diagnostic approach of the adnexal mass: what the oncologist should know. *Chin Clin Oncol.* 2020 Oct 1;9(5):69.