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Research Article

**CLINICAL PRESENTATION OF PELVIC MASS IN WOMENS  
OF DERA GHAZI KHAN AND ADJOINING AREAS  
(PAKISTAN)****Dr. Saddam Ashraf, Dr. M. Ijaz Ud Din, Dr. Mohammad Ali**  
DG Khan Medical College DG Khan, Pakistan**Abstract:**

**OBJECTIVE:** Analysis of pelvic mass patients in terms of parity, age, clinical presentation, operative procedure and pathology was as per the mass type in the tertiary hospitals of Punjab was the aim of this research.

**DESIGN:** Research design was descriptive case series.

**PLACE AND DURATION:** Research was carried out at DHQ Teaching Hospital Dera Ghazi Khan (Gynecology and Obstetrics Department) in the time period of January – December, 2017.

**PATIENTS AND METHODS:** We included all the case of pelvic mass without any discrimination of parity and age, the disease was diagnosed through clinical assessment, history diagnosis and also through USG. Confirmation of pelvic mass type was made through histopathology and surgery.

**RESULTS:** We included in our research 110 cases diagnosed with pelvic mass; among these cases 61 were (55.45%) in the age group of 30 – 50 years and one case were observed as under twenty and two were above seventy years of age. Maximum of the women were in the category of parous. Through clinical presentations we observed that 42 cases faced lower pain of the abdomen (38.18%) and 38 menstrual disturbances cases were also reported (34.54%). First clinical assessment was observed in 84 cases (76.36%) further confirmation was made through USG. In all the patients we included 104 cases (94.54%) with the help of USG. Gentile tract tumor was observed in 68 cases (61.82%); whereas, four cases were diagnosed with non-gynecological mass. Size of mass was observed (above 20 cm) in 10 cases (9.1%); however, less common observations were made about the malignant lesions below ten centimeters in size.

**CONCLUSION:** Every case of pelvic mass without any discrimination of parity and age was treated and investigated in detail. Diagnosis of the non-gynecological masses was also made; therefore, competent surgeons were assigned the task to treat the cases of pelvic masses.

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**INTRODUCTION:**

In the practice of gynecology, the incidence of pelvic pain is common and repeated, which is measurable and palpable arising from the presence of the extra-genital and extra genital organs in pelvis. Above 289,000 ladies are reported in USA about the adnexal mass accumulation through clinical and physical examination. In the pre-operative examination, it becomes a complex challenge. Detailed physical assessment and history about the pelvic assessment assists the diagnosis [1]. Obese patients having the inflammatory disease of pelvic face painful examination and palpation is also difficult. To plan and diagnose the treatment of such cases, method of diagnosis is sonography (transvaginal and trans-abdominal real-time imaging). Excellent results can be produced through transvaginal imaging about the pelvic organs; whereas, beyond the range masses are difficult to find out and determine, there are chances that diagnosis will miss those masses. Tissue contrast can best be achieved through MRI scans which permits the visualization of the posterior region about the false and true pelvis and it can also discriminate blood or fluid presence in the ovarian cyst. Uterus can also be imaged through MRI scan if USG cannot observe it in order to revoke any chance of misdiagnosis about the absence of congenital in uterus. Reasonable diagnosis can be made through sonographic and clinical features for the interpretation of the results. Sometimes, no clear information about the nature of mass is available till the performance of laparotomy [2].

These days, frequent practice has been observed for the determination adnexal mass through laparoscopy. Laparoscopy when compared to laparotomy has a plus feature of the less rate of morbidity, shorter hospital stays, lesser de novo formation of adhesion, decreased postoperative pain, faster recovery, reduced cure cost and better cosmetic results. However, there is a need of the careful pre-operative assessment for a successful and appropriate laparoscopy use to remove adnexal mass without compromising any of the clinical results. Risk factor identification has been enforced by numerous authors in order to careful use of laparoscopy for the management of the masses that may benign. The importance of the laparoscopic removal avoidance of ovarian cancer is because unintentional spillage could make the prognosis even worse and / or it may also mandate chemotherapy administration to Stage – I patients those who may then not be receiving it. Genital masses are adnexal and uterine [3]. These uterine masses are pregnancy, congenital irregularities, adenomyosis, pyometra, sarcoma, trophoblastic disease and leiomyoma. It may also be tubal, ovarian or vaginal. Other related genital masses

are pelvic lithopedion's and abscess. In the category of the extra-genital masses there are urinary bladder, appendicular mass, pelvic kidney, diverticula, retro-peritoneal tumor, bowel tumor, abdominal wall lesions, rare pelvic castle-man disease and retro-peritoneal fibrosis that also has an involvement of the pelvic para-cervical lymph nodes. After clinical examination, history, radiological imaging methods, laboratory investigations and surgically invasive techniques (laparotomy and laparoscopy), histopathology report helps in the definite diagnosis [4]. Pelvic mass excision through histologic assessment remains as the only available and reliable method of diagnosis establishment. Analysis of pelvic mass patients in terms of parity, age, clinical presentation, operative procedure and pathology was as per the mass type in the tertiary hospitals of Sindh was the aim of this research.

**PATIENTS AND METHODS:**

Research design was descriptive case series. We included in our research 110 cases diagnosed with pelvic mass; among these cases 61 were (55.45%) in the age group of 30 – 50 years and one case were observed as under twenty and two were above seventy years of age. Research was carried out at DHQ Teaching Hospital Dera Ghazi Khan (Gynecology and Obstetrics Department) in the time period of January – December, 2017. OPD clinics admitted the patients after the diagnosis of pelvic mass which is also included in the research. Evaluation of the symptoms was made through USG and results were recorded about the size, type, consistency, ascitic fluid presence and metastasis evidence in para-aortic lymph nodes and liver. Another provisional diagnosis was also made after observation of a detailed history through abdominal, pelvic and physical assessment. Pelvic mass was observed in number of women through clinical investigations and confirmation was made through USG at a frequency of (3.5 MHz) with the help of linear probe. Operative processes include simple cystectomy, bilateral sapling oophorectomy, debulking surgery or total abdominal hysterectomy. Analysis of the histopathological reports was carried out for the identification of the mass and its nature, we also followed our patients. Statistical data analysis was made through SPSS – 11.

**RESULTS:**

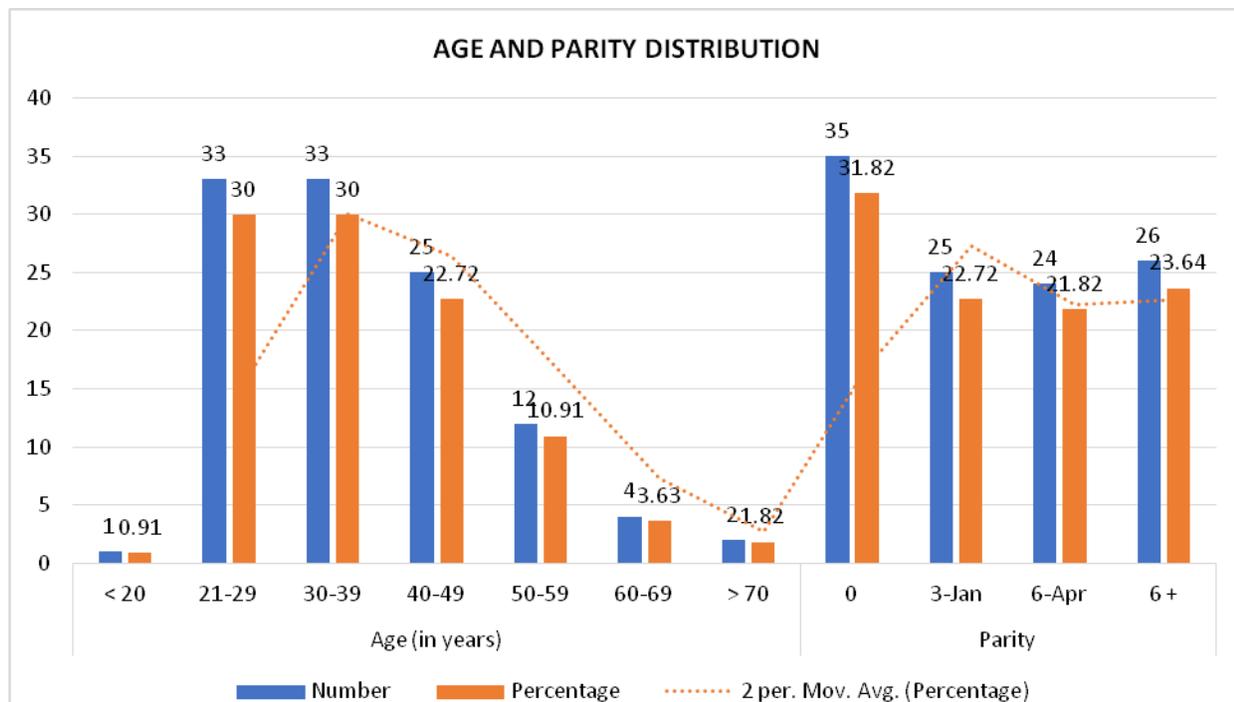
We included in our research 110 cases diagnosed with pelvic mass; among these cases 61 were (55.45%) in the age group of 30 – 50 years and one case were observed as under twenty and two were above seventy years of age as shown in Table – I. Maximum of the women were in the category of

parous as shown in Table – II. Through clinical presentations we observed that 42 cases faced lower pain of the abdomen (38.18%) and 38 menstrual disturbances cases were also reported (34.54%) as shown in Table – III. First clinical assessment was observed in 84 cases (76.36%) further confirmation was made through USG. In all the patients we included 104 cases (94.54%) with the help of USG. Gentile tract tumor was observed in 68 cases

(61.82%); whereas, four cases were diagnosed with non-gynecological mass. Size of mass was observed (above 20 cm) in 10 cases (9.1%); however, less common observations were made about the malignant lesions below ten centimeters in size. Surgical operation was carried out in 95 cases (86.36%); these cases also included 43 conservatives (39.1%) and 52 radicals (47.27%) surgery cases. In the light of medical advice 5 cases (4.54%) were left.

**TABLE I: AGE AND PARITY DISTRIBUTION OF CASES (n = 110)**

Details		Number	Percentage
Age (in years)	≤ 20	1	0.91
	21 – 29	33	30
	30 – 39	33	30
	40 – 49	25	22.72
	50 – 59	12	10.91
	60 – 69	4	3.63
	≥ 70	2	1.82
Parity	0	35	31.82
	3 – Jan	25	22.72
	6 – Apr	24	21.82
	6 +	26	23.64



**TABLE II: CLINICAL PRESENTATION AND DIAGNOSIS OF PELVIC MASS (n = 110)**

Detail		Number	Frequency
Clinical presentation	Mass alone	16	14.54
	Lower abdominal pain	42	38.18
	Mass with pain	14	12.73
	Menstrual disturbance	38	34.54
Diagnosis	By clinical examination	84	76.36
	By ultrasonography	104	94.54
	At surgery	6	5.45

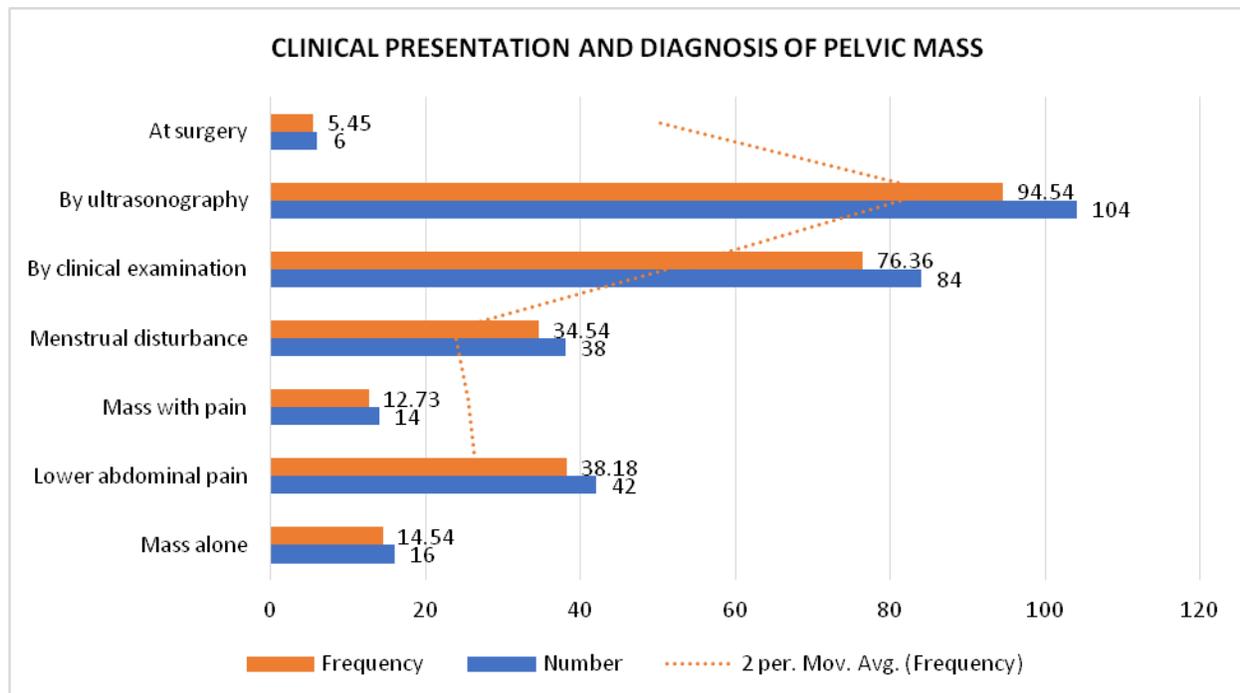


TABLE III: PATTERN OF MASSES AMONG CASES (n = 110)

Mass pattern	No. of Patients n (%)	Benign n (%)	Malignant n (%)
<b>Genital tract</b>	41(37.27)	30(27.27)	11(10)
<b>tumors</b>	26(23.6)	24(21.82)	02(1.82)
Ovarian	01(0.91)	-	-
Uterine	16(14.54)	-	-
Cervix	14(12.72)	-	-
Tubo-ovarian mass	01(0.91)	-	-
Ectopic tubal gestation	01(0.91)	-	-
Hydrosalpinx	02(1.82)	-	-
Haematosalpinx	02(1.82)	-	-
Pyosalpinx	01(0.91)	-	-
Pyometra	01(0.91)	-	-
Haematometra	01(0.91)	-	-
Pelvic abscess <b>Non-</b>			
<b>Gynaecological Masses</b>			
Avulsed spleen	01(0.91)	-	-
Hydatid cyst of spleen	01(0.91)	-	-
Appendicular abscess	01(0.91)	-	-
Ruptured bladder	01(0.91)	-	-

TABLE IV: SIZE OF MASS AT THE TIME OF DIAGNOSIS (n = 110)

Size (in centimeters)	Frequency (%)
5-10	(60)
11-15	(18.18)
16-20	(12.73)
> 20	(9.1)

## DISCUSSION

Maximum number of patients were in the category of productive group of age. Ovarian tumor was the repeated benign of mass; whereas, second common cause was uterine leiomyoma was the second most common cause [5]. Both extremes of life were not common for pelvic mass. Contrarily, we also observed that in the age group of thirteen years hematometra and haematocolpus was commonly found in the presentation of pelvic mass. Malignancy risk was increased with the advancement of the age; we also observed that above fifty years of patients common was ovarian tumor [6]. Mallick also reports same observation as he states that ovarian cancer increased incidence in the age of forty-five and above (60% – 70%) [7].

In the consideration of the relation of parity in women we observed parous women in majority. Uterine fibroids and ovarian tumors are associated to the nulliparity risk in women. Our research also observed that there was an increased malignancy incidence of ovarian tumor in nullipara women [8]. However, another cause was common in the nullipara women known as leiomyoma, we also observed its presence in grand-multiparous women. Among grand-multipara women having fibroid uterus, in the observation of the last-born age was in the range of 10 – 20 years [9]. According to Alam in the age of 40 – 60 years there was a common presentation of the ovarian tumors, in terms of old and young respectively we observed 65 years and 15 years. An early aged pregnancy and late menopause were associated to the ovary trauma caused by the recurrent ovulation. USG diagnostic value about the pelvic mass location is proved. Diagnosis was made through transabdominal USG among 104 cases in the total research sample [10].

According to Qureshi, transvaginal USG is superior in sixty-three percent of the cases, equal in twenty-seven percent and inferior in ten percent of cases in comparison to the trans-abdominal sonography [11]. To detect the large amount of pelvic mass less

importance is given to the trans-vaginal ultrasound; in order to measure and monitor ovarian follicle, endometrial carcinoma, polycystic ovarian syndrome and for the suspected ectopic pregnancy [12].

Surgery was carried out in 95 cases (86.36%). Radical surgery was carried out in the cases of bilateral salping oophorectomy and total abdominal hysterectomy. Conservative surgery was carried out in 43 cases (39.1%) as myomectomy, salping oophorectomy, cystectomy and biopsy was also carried out [13]. Pelvic mass assessment detected through routine USG or in the case of acute symptoms, which needs few methodical steps. Lesion primary sight detection is very important. Transvaginal USG is an interactive and dynamic assessment along with the echo structure analysis [14], and pelvic mass 'elasticity', which also allows the site-specific pain evaluation in various areas of the pelvic and mass movement evaluation in connection with the nearby structures. However, during research, our facility lacked in transvaginal USG [15]. The variation between malignant and benign ovarian tumor is considered as a challenge in the clinical assessment. Color Doppler USG combined with tumor markers may also help in the improvement of the method accuracy. We found that 30 cases (27.27%) among the 41 women had benign tumor and ovarian mass and 11 malignant ovarian tumor cases were (10%). This was confirmed through surgery and histopathological outcomes [16].

In four out of 110 patients, during surgery a non-gynecological mass was observed. Therefore, for the definite diagnosis we need laparotomy. Gynecologists and surgeons dealt with the case of non-gynecological masses [17]. Splenectomy was carried out in two patients, bladder repair was carried out in one case and also referred to the urologist for expert advice and appendectomy in one case.

## CONCLUSION:

Every case of pelvic mass without any discrimination of parity and age was treated and investigated in

detail. Diagnosis of the non-gynecological masses was also made; therefore, competent surgeons were assigned the task to treat the cases of pelvic masses.

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