

Clinical Presentation and Treatment Outcome of Ovarian Tumours at Gynaecology Ward

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ABSTRACT

OBJECTIVES: To document the clinical presentation and treatment outcome of ovarian tumours across all age groups.

STUDY DESIGN: Retrospective data analysis.

PLACE AND DURATION: This study was conducted at Gynae Unit III, Liaquat University Hospital for two years, from 19th July 2003 to 20th July 2005.

PATIENTS AND METHOD: Patient files of ovarian tumour cases were accessed and a predesigned proforma was used to record the data regarding demographics, history, physical examination, signs, symptoms, investigations, type of surgical treatment, histopathology, chemotherapy, radiotherapy, follow up and mortality. SPSS 10 was used to analyse the data.

RESULT: Out of all gynaecological admissions 1.29% patients presented with ovarian tumours. Out of 55 cases of ovarian tumours 15 (27.27%) were malignant with mean±SD age of 45±13.72 years, and 40 (72.73%) were benign with mean±SD age of 30±10.2 years. The commonest tumour found was of epithelial origin. Most of the patients presented in late stage when survival is poor.

CONCLUSION: Ovarian tumours are most common in multiparous women of 40-45 years of age. Majority of the patients present in advance stage of disease, therefore prognosis is poor and mortality is high.

KEYWORDS: Ovarian tumours, benign, malignant, epithelial, survival.

INTRODUCTION

Of all gynecological cancer ovarian malignancies represent the greatest challenge. It is the second most commonly diagnosed malignancy of the female reproductive system and fifth leading cause of the death.^{1,2}

Among gynecological malignancies it is unfortunately being increasingly encountered in Pakistan. According to multicenter study on the frequency of malignant ovarian tumour supported by Pakistan Medical Research Council (PMRC) incidence of ovarian malignancy was found to be 3.37% in 1973.² Contrary to the western studies and in India, ovarian tumour were more frequent than cervical cancers.³ Early ovarian cancer mass does not cause obvious symptoms and most of the women present with advanced stage where the prognosis is poor, even though intensive and complex therapies are available.⁴ Earlier detection and treatment may improve the survival rate.^{5,6}

The purpose of this study is to document the frequency, presentation and treatment outcomes in patients of ovarian cancer mass at our tertiary care hospital in order to highlight the magnitude of the problem in our setup which may be helpful to outline the preventive strategies.

MATERIAL AND METHODS

This retrospective study was carried out at Gynaecology Unit-III, Liaquat University Hospital Hyderabad,

Sindh - Pakistan. Patient files of ovarian tumour cases dated from 19th July 2003 to 20th July 2005 were analysed. A predesigned proforma was used to collect data regarding demographics, history, physical examination, signs, symptoms, investigations, type of surgical treatment, histopathology report, chemotherapy, radiotherapy, follow-up, and mortality. SPSS version 10 was used to calculate frequencies and proportions.

RESULTS

Out of 1160 total gynaecological admissions, cases of ovarian tumour were 55 (4.74%), among which 40 (72.72%) were benign and 15 (27.28%) were malignant. Mean±SD age of patients with malignant tumours was 45±13.72 years, whereas mean±SD age of patients with benign tumours was 30±10.2 years. The proportion of ovarian malignancies in all gynaecological admission during study period was 1.29%.

Among 15 ovarian malignancy cases highest number of patients was in age group of 40-45 years (9, 60%). The youngest patient was 10-years old. Major parity group for both benign and malignant ovarian tumours was multiparous with 10 (66.67%) and 20 (50%) cases respectively. The most common presenting complain was abdominal distension in malignant tumours with 10 (66.67%) cases, and abdominal pain in benign tumours as it was present in all 40 (100%) cases (**Table I**). Characteristics of both type of tu-

mours are detailed in **Table II**.

In patients with benign tumours 30 (75%) cases underwent oophorectomy/cystectomy while 10 (25%) cases underwent total abdominal hysterectomy (TAH) and bilateral salpingo-oophorectomy (BSO).

In patients with malignant ovarian tumours 10 (66.67%) cases had TAH, and BSO and omentectomy, among these 4 (26.67%) cases who presented with serous malignant ovarian tumours received chemotherapy and 1 (6.67%) received radiotherapy also; while remaining 6 (40%) cases who presented with mucinous malignant ovarian tumour received chemotherapy. Two (13.33%) patients who presented with dysgerminoma tumours, had TAH and BSO; 1 (6.67%) of them received radiotherapy and the other 1 (6.67%) received chemotherapy. Granulosa cell tumour was present in 1 (6.67%) patient who had unilateral salpingo-oophorectomy and received chemotherapy. Advance-stage disease was found in 2 (13.33%) patients; biopsy/debulking was performed in these patients and both of them received chemotherapy as well as radiotherapy.

Three (20%) patients were in stage I disease, they have regular follow-up and were free of disease, 3 (20%) patients were in stage III disease, 01 (6.67%) patient was lost on follow-up, and 2 (13.33%) patients had regular follow-up. Nine (60%) patients were admitted in stage IV disease with distant metastasis, among these one patient lost her follow-up, 6 (4%) patients were expired within six month after surgery during chemotherapy and 1 (6.67%) patient died before treatment.

TABLE I: AGE, PARITY AND CLINICAL PRESENTATION OF OVARIAN TUMOUR CASES

Age	Malignant (n=15)	Benign (n=40)
<20	1 (6.66%)	2 (5%)
21-40	5 (33.33%)	28 (70%)
41-60	9 (60%)	10 (25%)
Parity		
Nulliparous	4 (26.6%)	10 (25%)
Para 1	1 (6.67%)	10 (25%)
Multiparous	10 (68.8%)	20 (50%)
Presentation of sign & symptoms		
Abdominal distension	10(66.67%)	10 (25%)
Pain In abdomen	8 (53.33%)	40 (100%)
Irregular vaginal bleeding	3 (20%)	20(50%)
Anorexia	2 (13.33%)	0
Infertility	0	10 (25%)
Precocious puberty	1 (6.67%)	0

TABLE II: CHARACTERISTICS OF BOTH TYPES OF TUMOURS

U/S CT Scan	Malignant (n=15)	Benign (n=40)
Site		
Unilateral	5(33.33%)	30(75%)
Bilateral	10(66.67%)	10(25%)
Consistency		
Solid	4(26.6%)	0
Cystic	3(20%)	30(75%)
Cystic + solid	8(53%)	10(25%)
Size		
6-10cm	3(20%)	17(42.5%)
11-20cm	4(26.67%)	13(32.5%)
>20cm	8(53.33%)	10(25%)
CA - 125	11(73.3%)	1(2.5%)

DISCUSSION

Cancer has over taken heart disease as a leading cause of death all over the world, mortality from the cancer now accounting for 1/4 of all deaths.⁷ Generally ovarian cancer is the disease of peri and post menopausal women. The risk of developing ovarian cancer is at peak in the 5th decade of life⁷ which is comparable to our study. Most of the women in our study were parous, and this is simulating with the results reported by Saeed et al⁸ but contradict to western world where only 8.2%^{9,10} were nulliparous and Ahmed-J et al in Pakistan.¹¹

In our study reported symptoms in malignant cases were abdominal distension and gastrointestinal tract upset and in benign cases abdominal pain was the commonest symptom.

Abdominal and pelvic ultrasound is the commonest investigation done for diagnosis of ovarian cases, this was recommended by National Institute of Health (NIH) as a preferred means of diagnosing ovarian mass.¹² Serum CA-125 level was raised in 50% of the patient this test is useful in differential diagnosis and in follow-up of the disease, but it is not practiced to detect early disease because of its low sensitivity.¹³ Staging and grading of the tumour has important prognostic value. Surgery remain the gold standard treatment.¹⁴ Western studies quoted 36% women present-stage I, 19% in stage II, 32% in stage III and 13% in stage IV.¹⁵ In our study higher percentage 73.33% were present in stage III + IV and 3 (20%) cases were in stage I. Follow-up is usually ignored by the patient,

among these one patient was followed regularly and one last follow-up, six patients were expired with in 6 months after surgery during chemotherapy this similar pattern was seen.^{16, 17}

CONCLUSION

Ovarian tumours are most common in multiparous women of 40-45 years of age. Majority of the patients present in advance stage of disease, therefore prognosis is poor and mortality is high. Early detection, thorough treatment and regular follow-up are the need of time to reduce the morbidity and mortality.

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