



Study on Post Menopausal Ladies with Ovarian Mass – Management & Outcome

Authors

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Abstract

Background: Ovarian cancer is a common malignancy affecting Indian women and is an important cause of morbidity & mortality especially in elderly women. Main aim was to study the type of ovarian tumour in post menopausal ladies – Benign/Malignant – Histopathological type & management and follow-up

Method: Retrospective analysis of cases from Jan 2015 – Dec 2016 (2 years)

Results: Out of 3372 admission in the gynaecology ward, incidence of ovarian masses in post menopausal ladies is 2%. Among the ovarian masses 54% were benign tumours, 4% were borderline malignancy and 42% were malignant tumours. Among malignancy serous cystadenocarcinoma accounts for 60% & mucinous cystadenocarcinoma accounts for 40%. Out of the malignant cases all are primary ovarian tumour.

Conclusion: In post menopausal age group, malignant ovarian tumours are common. Among that serous cystadenocarcinoma is more.

Keywords: ovarian cancer, postmenopausal, female genital tract.

Introduction

Ovarian cancer is a common malignancy affecting Indian women and is an important cause of morbidity & mortality especially in elderly women⁽¹⁾. Ovarian malignancy ranks fifth in cancer deaths among worldwide and third among the female genital tract malignancy in India with age adjusted standardised ratio of 6.7/1lakh⁽²⁾. The current standard of care for ovarian cancer is staging laparotomy ie, maximal debulking surgery and tailored platinum based chemotherapy. Surgery allows accurate staging. Ovarian cancer

carries the worst prognosis among all gynaecological cancers, mainly due to the lack of effective screening methods for early stage detection of the disease⁽³⁾. The 5 year relative survival rate is around 25.4% for ovarian malignancy⁽⁴⁾. Ovarian cancer origin is still a subject of debate and research. The hypothesis of incessant ovulation as the reason for ovarian cancer is being questioned by the recent molecular genetic studies, which shows that the fimbrial end of the fallopian tube is the original site of origin⁽⁵⁾. As the world's population ages, remarkable

increase in the total number of ovarian cancer cases is expected. Lack of cancerous screening programmes for ovarian cancer & absence of awareness of ovarian cancer in the population are major hindrances to the diagnosis & management⁽⁶⁾.

The main factor behind the poor survival rates of ovarian cancer is the stage at presentation & diagnosis. One third of the patients present with stage I disease and 5 year survival rates exceeds 90%. Approximately 65% of patients presents with widespread (stage III or IV) disease, at which point cure is not possible. Although 50 – 75% of patients treated with chemotherapy initially responds to the medication most will have recurrences of the disease⁽⁷⁾. Anatomical location of the ovary & its complex histology is responsible for the late presentation of the ovarian cancer & its management difficulties. Considering the age related risk, a high index of suspicion is needed and biochemical & radiological assistance should always be implemented for earlier diagnosis and thereby to reduce the burden of morbidity and mortality.

Methods

This was a retrospective analysis of 72 post menopausal patients with ovarian mass over a period of 2 years (Jan 2015 – Jan 2016) conducted at Pariyaram Medical College, Kannur, Kerala.

Inclusion Criteria All post menopausal women with ovarian mass > 5cms were evaluated. Complex cyst, RMI >4, asymptomatic cyst which increase in size on follow up were included. Conservatively managed cases were excluded. Detailed history and examination done. Most of the patients had vague abdominal discomfort & loss of weight & loss of appetite. One patient presented with abdominal distension and mass P/V. Evaluated with CA- 125 and USG/CT findings. Surgery details were noted. Clinically suspected cases – staging laparotomy done. Histopathological examination of the specimen and cytology of ascitic fluid were noted in the

Pathology department. Immuno-histo-chemistry was performed as per the need. All patients with benign ovarian masses were followed up till discharge. In case of malignancy, the stage of the disease and further treatment like chemotherapy – details were taken and patients were followed up. The collected data were analysed by descriptive statistics & Pearson Chi square test using SPSS software.

Results

Table 1 Clinical presentation of Ovarian mass

Symptoms	Benign (%)	Malignant (%)
Asymptomatic	26	20
Pain abdomen	62	31
Mass abdomen	15.6	30.3
Dyspeptic symptoms	6.2	76
Menstrual symptoms	10	6
Urinary symptoms	Nil	18.2
Constitutional	Nil	22

Malignant ovarian tumours commonly presented with dyspeptic symptoms & constitutional symptoms.

In our study, out of 72 patients with ovarian mass, 39 cases were benign, 71% were serous cystadenoma, 26% were mucinous cystadenoma & 3% dermoid cyst. 3 cases were borderline ovarian tumour. Of this 3, 2 cases were serous cystadenoma & 1 was mucinous cystadenoma. Regular follow up is advised. Remaining 30 were malignant ovarian tumours. Of which 18 cases were serous cystadenocarcinoma and 12 were mucinous cystadenocarcinoma. Out of this malignant ovarian tumours, 12 cases were in stage I or II, 18 cases were in advanced stages, ie, stage III or IV. All cases were sent to radiotherapy department and 24 cases were taken chemotherapy. At the end of 1 year follow up, 2 patients were died due to advanced disease.

Table 2 – Comparision of histopathological pattern of ovarian mass

Histopathology	Our study	Jha et al	Sharadha S.0 et al
Serous cystadeno-carcinoma	60%	46.2%	42.9%
Mucinous cystadeno-carcinoma	40%	23%	28.6%

Discussion

The ovarian malignancy is the third leading cause of cancer in females. Therefore early diagnosis and management of ovarian tumours has significant clinical importance. About 60% of ovarian neoplasms in post menopausal women and about 20% in pre menopausal women are malignant. There is an increased association of nulliparity & with a family history. In the early stage, ovarian carcinoma is a notoriously silent disease. The presenting complaints are usually of short duration & insidious in onset.

In post menopausal women, any ovarian enlargement should be assessed by serum CA-125 and USG. Cysts that are simple, unilocular, \leq 8cms in diameter with normal serum CA- 125 can be managed conservatively. Women should be under follow up with ultrasound scan and serum CA- 125 at an interval of 4 months.

In the ovarian tumour, primary treatment is staging laparotomy. Depending upon stage of malignancy, adjuvant chemotherapy is considered. In stage Ia, grade I epithelial carcinoma, no need of adjuvant chemotherapy is required. In all other stage I disease, adjuvant chemotherapy with cisplatin and Paclitaxel for 6 cycles are required. Advanced stage disease – combination chemotherapy: Paclitaxel ($175\text{mg}/\text{m}^2$) & carboplatin ($450\text{mg}/\text{m}^2$). In advanced stage- need secondary cytoreduction.

Table 3

Stage	Approximate 5 year survival (%)
I	75-90
II	60-70
III	20-40
IV	5-10

Table 4 – Prognostic factors

Surgical stage of the disease – worse beyond stage II
Histological type – Endometrioid tumours has got a higher survival rate than serous type
Histological grade of the tumour – higher the grade, poorer the prognosis
Peritoneal cytology – Positive malignant cells, higher the risk
Presence of ascites – higher the risk
Presence of metastatic disease before cyto-reductive surgery – poor prognosis & shorter the survival
Volume of residual tumour – after primary surgery, when $<$ 5mm, better the prognosis
Ploidystatus – Diploid tumours are prognostically better compared to aneuploid tumours

Absence of effective screening modality, advanced stage at presentation and high case fatality rates challenges in the management of advanced epithelial ovarian cancer. Improved surgical staging with optimal cytoreduction, adjuvant chemotherapy and use of intra peritoneal chemotherapy have improved the survival. Primary optimal cytoreductive surgery still remains the standard of care in advanced epithelial ovarian cancer. Median overall survival was not found to be inferior on Neoadjuvant chemotherapy followed by interval surgery with fewer complications⁽⁹⁾. Neo adjuvant chemotherapy can be undertaken in advanced stage IIIc & IV disease where resection is difficult.

PET – CT scan helped in avoiding repeat surgery in patients with suspicious of recurrence. PET is of great benefit as a diagnostic tool in ovarian cancer when there is an increase in serum CA 125 & CT/MRI or when conventional imaging are inconclusive or negative. FDG PET/CT has a reported sensitivity of 80 – 100% for the detection of recurrent ovarian cancer⁽¹⁰⁾. Zimny et al reported that PET has a sensitivity of 96% for localising recurrent disease in patients with rising CA 125 levels⁽¹¹⁾. Nanni et al demonstrated that fused PET/CT is capable of detecting recurrent ovarian carcinoma with high sensitivity and specificity and recommended its usage for patients follow up in the presence of high risk disease relapse; equivocal findings at conventional radiological imaging and serum CA 125 levels⁽¹²⁾. In our study, out of 72 patients, 30 cases were malignancy, ie 42%. Among that 60% were serous cystadenocarcinoma & 40% were mucinous cystadenocarcinoma. In post menopausal cases, malignancy chance is more. Our study is comparable with Sharada S0's study, where 42.9% were serous cystadenocarcinoma & 28.6% were mucinous cystadenocarcinoma⁽¹³⁾.

Conclusion

Asymptomatic nature and vague constitutional complaints of the malignant ovarian tumours are responsible for their late presentation and thereby

its mortality & morbidity. Non specific abdominal complaints should be investigated properly and suspicion of ovarian malignancy to be ruled out. Early detection – cure rate is high.

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