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Original Article

Presenting signs and symptoms of ovarian cancer at a tertiary care hospital

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Abstract

Objective: To identify early warning signs and symptoms of ovarian cancer to create awareness for early diagnosis and management of the disease.

Methods: This study was conducted at the department of Gynaecology and Obstetrics, Liaquat National Hospital, Karachi from 2003 to 2007, having 75 patients. The information collected included age, education, and self perceived state of socio-economic class, presenting clinical signs and symptoms, basic and specific laboratory investigations. The disease was staged from I to IV upon surgical staging and the type of cancer was determined by histopathological examination.

Results: Mean age of the patients was 51 ± 12.3 years. Twenty (52%) patients were uneducated, 17 (22.6%) were below and remaining 19 (25.3%) were above higher secondary level. Most of the patients belonged to the middle socioeconomic class. Abdominal pain (57.3%) was the most common presenting symptom followed by abdominal distension (22.6%), urinary complaints (5.3%), vaginal discharge (2.6%) and postmenopausal bleeding (12%). More than half (56%) of the patients had stage III-IV disease. On histology, papillary serous cystic adenocarcinoma was the most common (54%) type followed by mucinous (22%), endometrioid (10.6%), yolk sac (2.6%), dysgerminoma (4%), and adult granulosa cell tumour (5.3%).

Conclusion: There are no specific ovarian carcinoma symptoms either in early or late stages to ensure early diagnosis, but in the age group above 40 years persistent clinical symptoms should always be further investigated (JPMA 60:260; 2010).

Introduction

Ovarian cancer is the most lethal gynaecological malignancy. Most patients present at an advanced stage, as the symptoms of early stage disease can be vague. The estimation of cancer burden is valuable to setup priorities for disease control. The comprehensive global cancer statistics from the international agency for research on cancer indicate that gynaecological cancer accounted for 19% of the 5.1 million

estimated new cancer cases among women in the world in 2002. Ovarian cancer accounted for 204, 000 new cases and 125,000 deaths.¹ In the western world cancer of the ovary is the fifth leading cause of cancer death among women.² Incidence rates are highest in developed countries with rates exceeding 9 per 100,000.³ In 2007, 4,317 women in United Kingdom died from ovarian cancer accounting for around 6% of all female deaths from cancer.⁴ Ovarian cancer is the fifth

most diagnosed cancer among Canadian women, accounting for 4% of all new cases. The age standardized world rate of ovarian cancer in Ontario Canada is (10.7 per 100,000 per year).⁵ The age-standardized incidence rate of ovarian cancer increased from 4.0 to 5.4 per 100,000 women (standard: world population) in Osaka Japan during the period (1975-1998).⁶ It is the most fatal malignancy and the most common cancer of gynaecological origin in Pakistan. The age standardized world rate of ovarian cancer in Karachi, Pakistan is (10.2 per 100,000 per year).⁷ In one study it was the 4th prevalent cancer in the hospitals of Lahore.⁸ In contrast, the ovarian cancer rate in Bombay, India is 7.2 per 100,000 per year.⁸

The objective of the study was to find early warning signs and symptoms of ovarian cancer to create awareness for early diagnosis and management of the disease.

Methodology

From 2003 to 2007, 75 patients of ovarian cancer diagnosed for the first time were studied. Patients with recurrence of ovarian cancer and those with secondary involvement of the ovaries were excluded.

The study was conducted at the department of Gynaecology and Obstetrics, Liaquat National Hospital and Medical College Karachi, a private sector facility. The information collected included age, education, self perceived state of socio-economic class, the first presenting clinical signs and symptoms perceived, basic and specific laboratory investigations, like Ca125, ultrasound, CT Scan/MRI and IVP were carried out where necessary, and the results were recorded on a structured proforma after taking consent from the patient. The disease was staged from stage I to IV upon surgical staging and the type of cancer was determined by histopathological examination. All the 75 patients were operated and peritoneal washings were taken and debulking was performed of neoplastic tissue and tissue sample was sent to the histopathology laboratory where the histopathological examination confirmed the pathology and type of cancer.

Data analysis was done through SPSS-10.0. Patients' age was presented by Mean \pm SD. For presentation of qualitative data variables like presenting sign and symptoms, socio-economic status, lab findings and histological findings, frequencies and percentages were computed. Statistical test was not applicable for this descriptive type case-series.

Results

Mean age of the patients was 51 ± 12.3 years. Nearly 70 % of the patients presented between the age of 40-70 years. There were 18.6% patients below 40 years of age and 10% were above 70 years of age. Regarding educational level, 39 (52%) were uneducated, 17 (22.6%) were below Higher Secondary level of education and remaining 19 (25%) were

Table: Sign and symptoms at first presentation according to the stage of disease.

Stage (n)	Pain	Distension	PMB*	Discharge	UC*
Stage I (13)	9 (69.2%)	2 (15.3%)	0	2 (15.3%)	—
Stage II (20)	13 (65%)	5 (25%)	1 (5%)	—	1 (5%)
Stage III (26)	13 (50%)	7 (26.9%)	4 (15.3%)	—	2 (7.6%)
Stage IV (16)	8 (50%)	3 (18.7%)	4 (25%)	—	1 (6.2%)
Total 75	43	17	9	2	4
Overall	57.3%	22.6%	12%	2.6%	5.3%

PMB (postmenopausal bleeding) UC (Urinary complaints).

above. Most of the patients (71%) belonged to the middle socioeconomic class. Majority of the patients complained of abdominal pain (57.3%) as the first presenting symptom followed by abdominal distension (22.6%), urinary complaints eg: (dysuria, frequency of micturition, retention) (5.3%), vaginal discharge (2.6%) and postmenopausal bleeding (12. %). Surgical staging was done and more than half (56%) of the patients were found to be having stage III -IV disease. On histology, papillary serous cystic adenocarcinoma was found to be the most common (54%), followed by mucinous 22%, endometrioid (10.6%), yolk sac (2.6%), dysgerminoma (4%), and adult granulosa cell tumour (5.3%).

Discussion

The findings of our study suggest that ovarian cancer was rare below age 40 years and above age 70. We found abdominal pain as the most common symptom followed by abdominal distension, urinary complaints, vaginal discharge, and postmenopausal bleeding. A similar study carried out in Poland⁹ gave the median age for ovarian cancer to be 54 years with abdominal pain as the most frequent presenting complaint similar to what we discovered, followed by abdominal distension. In their study they stated ovarian cancer to be rare before age 40 and after age 70 which is a similar finding in our study. However, a study conducted in Nigeria (Ibadan),¹⁰ stated abdominal distension to be the most common presenting feature with a higher proportion of patients presented with advanced stage disease which is similar to our study. Others also reported abdominal distension as a common feature in their study.^{11,12}

On histology, papillary serous adenocarcinoma was the common finding, which was also a feature in other studies.^{11,12}

It was observed that the majority of the patients belonged to middle-class socioeconomic status. However, we found no relation between the stage of disease and the socioeconomic status of the patient. Brewster H, et al reported¹³ higher proportion of deprived class presenting at advanced stages of the disease.

We found no specific sign or symptom for early stage or for late stage disease. In early as well as in late stage, the

common symptoms we found were abdominal pain and distension, but most of the patients present at advanced stage when nothing fruitful can be done. Screening by Ca 125 levels and ultrasound can be helpful but it is not always predictive or a conclusive screening tool. Awareness however can be helpful to understand the warning signs and symptoms of the disease which are usually ignored by patients.

Conclusion

There are no specific ovarian carcinoma symptoms either in early or late stages to ensure early diagnosis, but in the age group above 40 years persistent clinical symptoms should always be further investigated, as majority of the patients are diagnosed late which leads to a poor prognosis.

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