

## THE COMPARISON BETWEEN PRESENTING SYMPTOMS OF OVARIAN CANCER AND OTHER ABDOMINAL - PELVIC CANCERS

V. Mogharab<sup>1</sup>, F. Mogharab<sup>2\*</sup>

<sup>1</sup>Department of Pediatrics, Jahrom University of Medical Sciences, Jahrom, Iran

<sup>2</sup>Research Center, Department of Obstetrics and Gynecology, Jahrom University of Medical Sciences, Jahrom, Iran

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### ABSTRACT

**Introduction:** Diagnostic delays of ovarian cancer, has been attributed to the lack of a reliable and cost-effective screening test and presumption that ovarian cancer is asymptomatic in the early stages. To investigate presenting symptoms of ovarian cancer and compare with symptoms of other abdominal-pelvic cancers

**Methods:** We reviewed the medical records of all women with abdominal-pelvic cancers between March, 2003 and March, 2005 in Shiraz medical centers to compare, presenting symptoms of ovarian cancer and other abdominal-pelvic cancers.

**Results:** Of 168 women with a diagnosis of abdominal-pelvic cancers, ovarian cancer was diagnosed for 22 women. (Stage I: 0, Stage II: 2, Stage III: 10, Stage IV: 7 and 3 patients without staging.) The mean age of patients with ovarian cancer was 51/6. The sensation of abdominal mass was more common in women with ovarian cancer than other abdominal-pelvic cancers ( $P=0.001$ ). Constipation was documented in the patients with colon cancer more than women with ovarian cancer ( $P=0.012$ ), whereas urinary symptoms were more common in patients with ovarian cancer ( $P=0.004$ ). Although the women with bladder cancer complained from urinary problems more than who had ovarian cancer ( $P=0.001$ ), but defecation problems and abdominal pain were more detected in patients with ovarian cancer ( $p=0.05$ ).

Author Correspondence, e-mail: [mogharabfarideh@yahoo.com](mailto:mogharabfarideh@yahoo.com)

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**Conclusion:** The most common cases of ovarian cancer present in the end stage that usually have poor prognosis. It can be associated to both patient and healthcare factors. This cancer is associated with many symptoms, but few symptoms are related to reproductive system. Sensation of abdominal mass, abdominal pain and urinary and defecation problems are the symptoms that can be associated with this cancer.

**Key words:** Presenting Symptoms, Ovarian Cancer, and Abdominal-Pelvic Cancers.

## INTRODUCTION

Ovarian cancer is the fifth most common cause of cancer-related deaths in US women after lung, breast, colon, and pancreatic cancer (1-4). Most women 60%-75% (3-5) have stage III or IV tumors at diagnosis, with 5-year survival rates of 30% or less(2,5-6). Despite aggressive surgery and chemotherapy, the prognosis for these women is poor, with a 5-year survival rate of less than 30%. This outcome is due, in large part, to the lack of effective prevention and early detection strategies. Diagnosis of ovarian cancer in early stages is very important and can improve the prognosis of the patients. The advanced stage of ovarian cancer at diagnosis has been attributed to 2 factors: the lack of a sufficiently reliable and cost-effective screening test (7-10) and the presumption that ovarian cancer is asymptomatic in the early stages, resulting in diagnostic delays (11-15) Symptoms of ovarian cancer are often described as non-specific, but in many studies suggest that women may have symptoms for weeks to months before the initial diagnosis of ovarian cancer(11,13,16)For most women, the initial documented symptoms were not specifically related to the pelvis or commonly considered gynecologic problems(17).The prevalence of the early non-specific symptoms among the patients with ovarian cancer and comparing with healthy women has been studied(20), but differs between these patients and other patients with abdominal-pelvic cancer has not been investigated. The types of symptoms present in women with different delays in diagnosis have not been assessed (18-19), and the convicting results of medical record and self report data have not been addressed. The current study investigated presenting symptoms of ovarian cancer and compare with symptoms of other abdominal-pelvic cancers.

## MATERIAL & METHODS

Patients for this case-control study were identified at two hospitals in Shiraz city, Nemazee and Shahid Faghihi hospital where are the main cancer centers in south of Iran, from 2003-2005. We reviewed the pathologic reports of all women who had abdominal-pelvic mass. Women were eligible if their pathologic reports were a primary intraabdomen or pelvic

cancer. Then we found their medical chart according to unit numbers. We used a questionnaire that was designed for cancers screening in Shiraz medical school to collect our data. This questionnaire had demographic questions and others about chief complaint of patient and other clinical problems (abdominal pain, abdominal mass sensation, urinary problem, defecation problem and vaginal discharge or bleeding). These dichotomous (Yes/No) and contingency questions were followed by a question about the period between the first complaint and diagnosis. The questionnaires were filled according to the medical records of all patients who had abdominal-pelvic cancer in their pathologic reports. If the medical records were not completed, we called the patient to interview. According to the last diagnosis, the patients were divided into two groups: 1. The patients who had ovarian cancer as the case group (group A). 2. And who had each other abdominal-pelvic cancer (gastric cancer, liver and biliary malignancy, small bowel cancer, colon cancer, renal carcinoma, malignancy of bladder, uterus cancer) as the control group (group B). The patients of group A and B were divided into two sub-groups again as they had each clinical symptom or did not. So we had four groups for each clinical symptom:

A1: The patients with ovarian cancer and considered clinical symptom.

A2: The women in case group who did not have considered clinical symptom.

B1: The patients in control group who had clinical symptom that we wanted to compare.

B2: The women in control group without considered clinical symptom. At last these groups were compared statistically with t-student test and chi-square test. We used SPSS for statistical analysis.

## RESULTS

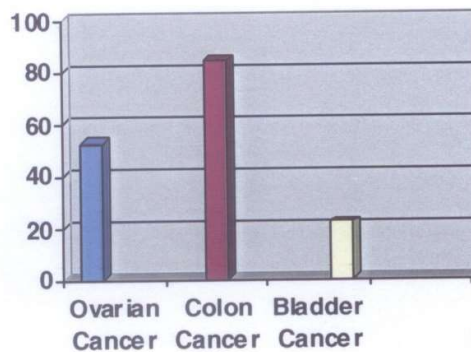
Between 220 patients who had abdominal-pelvic cancer, we found 168 women with appropriate medical records (response rate: 76.36%). A total of 22 women were with incident cases of ovarian cancer. The mean age of the women with ovarian cancer was 51.6 (SD: 19.38) and the patients who had other abdominal-pelvic cancers was 57.7 (SD: 15.77) at the time of the first referring. 31.8% of ovarian cancers were stage IV (n=7). 45.4% of women with ovarian cancer were diagnosed in stage III (n=10). Only 2 patients were diagnosed in stage II (9%) and no cancer was found in stage I. In three patients, stage of tumor was not known.

The sensation of abdominal mass was more common in women with ovarian cancer than other abdominal-pelvic cancers (P=0.001) (Table 1). Constipation was documented in the patients

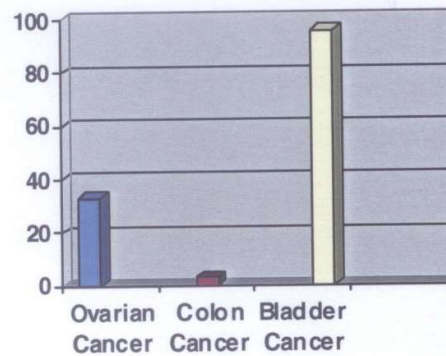
with colon cancer more than women with ovarian cancer ( $P=0.012$ ), whereas urinary symptoms were more common in patients with ovarian cancer ( $P=0.004$ ) (Figure 1). Although the women with bladder cancer complained from urinary problems (hematuria, frequency, disuria, urgency) more than who had ovarian cancer ( $P=0.001$ ), but defecation problems (diarrhea and constipation) and abdominal pain were more detected in patients with ovarian cancer ( $p=0.05$ ) (Figure 2).

**Table 1.** Frequency of symptoms and signs between ovarian cancer and other abdominal-pelvic cancers

Symptoms	Ovarian Cancer	Other Abdominal-pelvic Cancer	P-value
Abdominal Pain	81%	70%	0.20
Abdominal Mass Sensation	70%	29.2%	0.001
Urinary Problem	31.8%	36%	0.5
Defecation Problem	52%	50%	0.5
Uterus Bleeding	22.7%	10.9%	0.1
Weight Loss	45.5%	52%	0.49
Fatigue	27.3%	40%	0.51



**Fig.1.** Frequency of defecation problem between the patients with ovarian cancer, colon cancer and bladder cancer



**Fig.2.** Frequency of urinary problem between the patients with ovarian cancer, colon cancer and bladder cancer

## DISCUSSION

Most patients in our study with ovarian cancer were diagnosed in stages III or IV and had symptoms or signs for weeks to months before ovarian cancer was diagnosed. These data showed that options for ovarian cancer prevention and early detection are limited. Our study revealed that sensation of abdominal mass is more common in ovarian cancer patients in comparison to the other abdominal-pelvic cancers. Our findings among cases are in general agreement with reports based on case series that bloating, fullness, and pressure in the abdomen is the most prominent symptom, with pain also important, followed by problems with urination and constipation [20-23]. For most women, the initial documented symptoms were not specifically related to the pelvis or commonly considered gynecologic problems. Barbara. P et al [23] and Nelson et al [20] have found similar results in their researches. These results imply that ovarian cancer should take into consideration in women with symptoms that are not specifically related to the pelvis or gynecologic problems. In other studies gastrointestinal symptoms, either abdominal pain or bowel changes were documented most frequently as the presenting and most common symptoms in women with ovarian cancer. Despite the previous studies, urinary problem was more common in patients with ovarian cancer [23]. In this way we can suggest that all patients with sensation of abdominal mass must be screened for ovarian cancer. On the basis of these data and information from other studies, it remains unclear how we can effectively increase early diagnosis of most ovarian cancers. Although mass screening has the potential to improve early recognition based on rapid technological advances in the analysis of tumor/serum markers, it remains a challenge given

the rarity of ovarian cancer diagnoses in the general population and the resulting high false-positive rates of screening tests. Our study had several limitations. As ovarian cancer is not so common, our sample size is small. Sometimes the medical records of patients were not complete and did not contain needed information. So we had to call the patients for interview but sometimes the patients were died.

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