IJBC 2013;6(1): 47-49

The Frequency of the Different Kinds of Ovarian Cancer in Shahid Sadoughi Hospital, Yazd, Iran

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Submitted: 01-05-2013 , Accepted: 28-10-2013

Abstract

Background: To investigate the frequency of different types of gynecological tumors among patients who were operated in Shahid Sadoughi hospital, Yazd, Iran, for 3 years.

Material and Methods: This study investigated 101 patients with gynecological tumors from March 21.2008 to March 20 2011.. Lesions were considered in 5 groups according to the prevalence of malignancy. Lymph node and peritoneal involvement were also investigated.

Results: The mean age±SD at diagnosis was 50.54±12 years. The most prevalent pathologies were serous, musinous, endometrioid and undifferentiated.

Conclusion: The age group 40-60 years was the most prevalent among other age groups. Endometrioid tumor was the most prevalent kind of malignancy among patients with ovarian cancer coming to our center and undifferentiated form was reported as the least prevalent.

Keywords: Ovarian neoplasms, epidemiology, age, pathology, Iran.

Introduction

Ovarian cancer is the leading cause of death from gynecological malignanciesof the female reproductive system [1, 2]. Asian women have lower risk of the disease compared to other regions [1].

The incidence of ovarian cancer increases with age [3].The initial management of women with ovarian cancer is surgical. However, many women with ovarian cancer, particularly in early stage of the disease, do not receive optimal surgical staging and treatment [4, 5]. In contrast to some other types of cancer, surgery is almost always performed in women with suspected EOC, even when advanced.

Treatment outcome is dependent on many factors [6-8]. Older women have a less favorable outcome than younger women.

Material and Methods

A cross section survey was performed on patients who were operated for gynecologic tumors from March 21.2008 to March 20 2011 at the Shahid Sadoughi hospital, Yazd, Iran. Two hundred patients initially entered the study but 99 patients were excluded due to benign lesions and limited uterine tumors. The patients who had limited tumors in ovary and metastatic tumors of ovary in uterine were 101 cases.

The factors; age at diagnosis, pathology of tumors, lymph node and peritoneum involvement were considered in the study. Patients were distributed in 3 groups according to their age that included 20 to 40 years, 40-60 years and upper than 60 years. Tumors were divided in to 5 types; endometrium, serous, mucinous, undifferentiated, other forms. In addition, lymph node and peritoneal involvement were investigated and compared with the type of pathology.

Results

The mean±SD of age at diagnosis was 50.54±12 years and the age group of 40-60 years included 54.5% of patients and was the most prevalent age group.

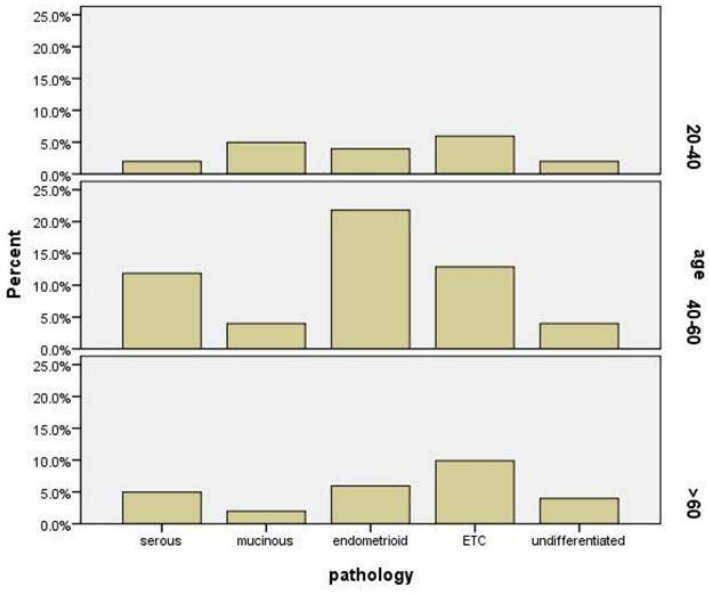

Figure1: The frequency of different tumor pathologies in age groups

The majority of patients presented endometrioid tumor (31.7%) and undifferentiated was reported as the least prevalent in our study. Malignant lesion were reported in 20-40 and 40-60 years groups as 31.6% and 37% , respectively and endometrioid was the most prevalent pathology which was reported in 40-60 years group (Figure 1).

Generally, lymph node involvement was observed in 44.5% of patients and peritoneal involvement was present in 16.8% of cases. The most common cause of malignancy in patients with involved lymph nodes was the endometrioid form. These results showed a difference between groups considering the LN involvement, but for analytic tests cases were divided to two big groups endometrioid and non-endometrioid. The lymph nodes were involved in endometrioid tumors approximately two folds compared to other forms of malignancy (P=0.013). Peritoneal involvement was more prevalent in the serous form of malignancy (P=0.037).

Discussion

The mean age±SD in our study was 50.54±12 years and the age group 40-60 years was the most prevalent age group. Previous studies have reported the mean age to be 50-70 years which is the post-menopausal age [9-15]. In other studies four prevalent pathologies have been reported with three of them being present in our study: serous, musinous and endometrioid, but we saw undifferentiated form which has not been reported by others [9-13, 15]. Our investigation presented the endometrioid as the most prevalent pathology, but other studies have reported the serous form as the most common one [15, 14].

Synchronous uterine and ovarian lesions were considered in our study and endometrioid was the most common one in this regard which is in line with other studies [11].

We investigated the malignancy prevalence according to three age groups. Endometrioid pathology was the most frequent pathology in 40-60 years age group.

The incidence of lymph node involvement has been reported to be related to the stage and the type of malignancy [16]. We observed that lymph nodes were involved in endometrioid pathology more than other forms.

Conclusion

The age group 40-60 years was the most prevalent among other age groups. Endometrioid tumor was the most prevalent kind of malignancy

among patients with ovarian cancer coming to our center and undifferentiated form was reported as the least prevalent.

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