A STUDY ON THE AGE OF CERVIX CANCER INCIDENCE IN PATIENTS REFERRING TO RADIOTHERAPY AND ONCOLOGY WARD OF AHVAZ GOLESTAN HOSPITAL DURING 1995-2010

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Abstract

Introduction: Cervical cancer is one of the most popular genital cancers in females, and it is the third cancer in women in prevalence. It is one the rare cancers which can be found before happening and we can reduce its prevalence and incidence by screening. In this study we want to investigate the age incidence of cervical cancer.

Methods: This was a retrospective study conducted on the medical records of patients with cervical cancer referring to the radiotherapy and oncology department of Ahvaz Golestan Hospital during 1995 to 2010. The data were analyzed with the statistical package SPSS (version 16) using descriptive and quantitative assessments.

Results: Total of 430 patients with the mean age 52 years old were investigated. During this 15 year period, the number of patients with cervix cancer was not significant (P-value= 0.6). The number of patients between different decades of life of the patients showed significant difference (P-value= 0.001). In this study the most frequent patients belong to the decade of 50-60 years old (34.2%), and then 40-50 years old (28.8%). Absolute frequency of patients in the year 1995 with 10 patients and relative frequency with 1.3% was the least and the most was the year 2010 with absolute frequency of 47 patients and relative frequency of 3.6% in the years of study.

Conclusion: Mean age of cervical cancer is similar to other big cities of Iran and other countries and there is neither increase nor decrease of its age incidence in these years.

Keywords: Cervical cancer, Age incidence, Risk Factors, Ahvaz

Introduction

Cervical cancer is one of the most prevalent cancers in the female reproductive tract that takes place in the third place of most common cancers in women in developed countries (1) and is the second leading cancer in developing
countries (2-4). Treatment of this cancer in addition to increasing life expectancy increased quality of life and is also one of the few cancers that can be detected in the pre-malignancy stage.

Therefore, it is important to recognize the prevalence and common risk factors as well as epidemiological characteristics of the disease (5). Performing epidemiological and comprehensive studies on such disease is one of the main reliable approaches in this regard (6).

Cervical dysplasia indicates the growth disorder which is characterized by the appearance of cervical pre-cancerous cells and cervical cancer. Cervical dysplasia often has no symptoms, but in 5% of cases can proceed to the cervix. Early diagnosis of precancerous lesions is carried out by Pap smear that prevents greatly enhancing of lesions to cancer (7). The average age of cervical cancer in the United States is 47 years and the peak is between the ages of 35-39 and 60-64 years (8). Cervical cancer is age-related. Age of developing cervical cancer may be different in different geographical areas.

In Iran and elsewhere, several studies have been conducted on the age of onset of cervical cancer (9, 10). Results of a studies showed that age 44 is the incidence of this cancer in Kashan, Iran (11), the average age of women in Tabriz for CIN lesions and invasive cancer of the cervix, were 4 and 7 decades, and the marriage age most of the patients was 15-19 years (12).

In the city of Yazd in the sample population, the average age of women with cervical cancer was 48 years (13). Several studies have been conducted in Tehran among different population age groups showed the different averaged age of onset for these groups including 43.18, 50, 55, and 52.9 years old (14)(15) (16)(17).

The mean age was 36 years in Babol (18), while in Kurdistan was 49 years (2). The investigation also showed abroad in China, the incidence of cervical cancer in young women with 35 years or less than 35 years was from 2.8% to 15% over the past 30 years (19) and in another research the average age of catching has been reported as 47 years (20).

The mean age was reported as 53.8 years in a research in Nigeria (21) and in another study in the United States it was declared as 55 years (22). Previous studies have shown a relatively high head and neck cancer among Iranian populations (20-22).

The age of all patients referred for radiotherapy during the last 15 years were examined to obtain a mean age at diagnosis of the patients in the targeted area and compare it with the average age of onset of the disease in other areas compared and also compare several years of these studies in order to determine the changes in the age of disease mechanisms and screening method for timely action.
Materials and Methods

In this study, the profiles of patients who referred to the oncology center in Ahvaz Golestan Hospital during a 15-year period were used. The records were examined by year and age of onset of cervical cancer each year individually and compared. The criterion of age of first diagnosis, pathology, and demographic variables were found in the record. Statistical information contained in the records was classified annually and in distinct categories and age was placed as the main parameter in different tables. Additionally for simplicity, the age of the patients was divided into groups of ten-year and the relative incidence of cervical cancer was calculated in each age decade.

Results

1. The study was conducted during a 15-year period from 1995 to 2010 in Ahvaz Golestan Hospital, Department of Radiation Oncology won patients who were diagnosed with cervical cancer, and 430 patients in total were enrolled in the study. Absolute frequency of patients with cervical cancer each year has been specified in the following graph.

2. The frequency was calculated based on the age. among a total of 430 patients with cervical cancer referred to radiotherapy and oncology center of Ahvaz Golestan Hospital and the highest rates were at age group of 50-60 years as 147 (34%) and in older than 90 years group, the lowest frequency was 2 (0.5 percent), respectively. The great difference with P= 0.001 was statistically significant.

3. Mean age of cervical cancer in 430 patients was 51.84 years, respectively. In the comparison between the average age in years of study, with P= 0.6 there was no significant difference.

4. There was no significant relative change in the prevalence of the cervical cancer patients referred to the radiotherapy center in Ahvaz Golestan Hospital, Iran between the studied years, and the average over the studied period where the prevalence was 2.2%.
Conclusion and Discussion

During the years 1995 to 2010, 430 patients diagnosed with cervical cancer and referred to Ahvaz Golestan Hospital. Absolute frequency of patients during the study process has increased but there was no significant change in relative abundance. The average age of onset was 52 years. Other studies similar to our study showed that the average age of cervical cancer in some cities and countries were more and in some less. During the study, the onset age had not significant the decrease or increase and the average age of the patients was similar to studies in big cities like Tehran and Tabriz and it seem that the onset age in studies conducted in cities including Babol, Kurdistan, and Kermanshah are less than this amount. It is necessary to more accurate researches be conducted in this field of studies and statistical comparison.

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