Original Research Paper

Genetics

ENDOMETRIAL CANCER: EPIDEMIOLOGICAL STUDY IN WESTERN MAHARASHTRA.

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ABSTRACT **INTRODUCTION:-** Endometrial cancer comprises about 4% of all cancers in women globally and occurs predominantly after the menopause. Some of the highest incidence rates worldwide are found within European populations with rates varying only by a factor of two between countries. Cross-sectional incidence rates have been increasing among postmenopausal women in most European populations, whereas mortality rates have been declining, with few exceptions .In premenopausal women, endometrial cancer is relatively rare, and where data on incidence are available, observed trends are mainly decreasing. Over time, the highest levels of uterine cancer risk have shifted to younger women. Present study is to present the characteristics of endometrial cancer in patients present in Western Maharashtra

Material and Methods: Present epidemiological study of endometrial cancer is retrospective, descriptive type, carried out at Department of Obstetrics and Gynecology, of Medical Colleges in western Maharashtra.

RESULTS AND DISCUSSION:- In this study, we evaluated a total of 100 women who suffered from endometrial cancer with a mean age of 65 years. Endometrial cancer incidence rates reported from countries with nationwide cancer registration and those from more developed countries are generally similar to each other. In less developed countries and regions, endometrial cancer rates are relatively lower, and this is likely due in part to the lack of quality data from large portions of the population in these countries.

CONCLUSIONS- Endometrial cancer has emerged as one of the commonest malignancy affecting women in western Maharashtra. Efforts should be made to detect the disease at early stage through population education with respect to epidemiological factors.

KEYWORDS : Endomerium, epidemiology, carcinoma

Introduction:-

A woman's age can affect her risk of developing each type of reproductive system cancer[1]. Women in their sixties and early seventies had the highest risk of uterine cancer. The peak was in women between the ages of 60 to 64, who had a rate of 99.0 new cases per 100,000 women. Around this peak, incidence rates increased with age for women aged 25 to 59 while they decreased with age for women 65 and older.

Endometrial cancer is the most common malignancy of the female genital tract. Many of the endometrial cancers occur in the 6th and 7th decades of life and 95% of patients are over 40 years old. Overweight, diabetes, lack of physical activity, multiparty, early menarche, delayed menopause and being only exposed to estrogen are the known risk factors for endometrial cancer[2]. Various Studies show delayed menarche, young age in first delivery, breast feeding and use of oral contraceptive pills decrease endometrial cancer while irregular and short menstrual cycle increases the risk. Using IUD and tubectomy decreases while obesity and lack of physical activity increase the danger of endometrial cancer. Exposure to estrogen and stimulating ovulation period increase the danger. The standard treatment of endometrial cancer includes laparotomy, collecting peritoneal liquid for examining the cytology, hysterectomy by removing both ovaries and fallopian tubes and staging the surgery for patients who are in danger of extra-uterine diseases[3]. Since no studies have been conducted on the epidemiology of endometrial cancer in our region, we have decided to determine the frequency of types of endometrial cancer in patients. We are going to use the information for preventive programs and early diagnosis.

Endometrial cancer comprises about 4% of all cancers in women globally and occurs predominantly after the menopause. Some of the highest incidence rates worldwide are found within European populations with rates varying only by a factor of two between countries. Cross-sectional incidence rates have been increasing among postmenopausal women in most European populations, whereas mortality rates have been declining, with few exceptions .In premenopausal women, endometrial cancer is relatively rare, and where data on incidence are available, observed trends are mainly decreasing. Over time, the highest levels of uterine cancer risk have shifted to younger women.

The epidemiology of endometrial cancer in Western countries is fairly well understood. Family history of endometrial cancer is associated with an increase in risk. Whereas high parity and late age at last birth is considered to give long-lasting protection.The role of obesity as a risk factor in both premenopausal and postmenopausal women is also firmly established whereas there is limited evidence that physical activity has a protective effect. Surveillance of the incidence of endometrial cancer is important from both epidemiologic and public health perspectives.

Material and Methods:

Present epidemiological study of endometrial cancer is retrospective, descriptive type, carried out at Department of Obstetrics and Gynecology, of Medical Colleges in western Maharashtra. 100 cases of endometrial malignancy were studied. All cases were diagnosed based on clinical findings, supported by imaging consisting of ultrasound, CT scan, and MRI. The diagnosis was confirmed on histopathology.

Results:

In this study, we evaluated a total of 100 women who suffered from endometrial cancer with a mean age of 65 years. The majority of patients were aged 60 to 69 years. Frequencies of hypertension, diabetes, BMI, history of infertility and breast cancer. Totally, 68 patients were in stage 1 and 32 were in other stages.

Discussion:

 In this study, the mean age of patients was 65 years and the median was 63.17 year. In David's study, the common age for endometrial cancer was 60-75 and younger than 40 was uncommon. The percentage of underlying diseases of diabetes, hypertension and overweight in individuals with diagnosed endometrial cancer was 36% 26.7% and

85.3% respectively. In a study by Lapinska, the frequencies of diabetes, hypertension, obesity and pathologic obesity were reported as 39%, 26.7%, 36.1 % and 12.4%, respectively[4]. Since obesity is the problem of the current century and study of Lapinska was related to the years.

In addition, some of the patients with cancer were diagnosed with 72% hypertension and 64 % overweight in a study by Bratos K. In addition to the time of study, racial factors can be important in rate of obesity[5]. In a study by Bratos K, 63% of patients had 1-2 abortions.   This difference could be due to the larger sample size in this study. The average number of deliveries in our study was 3.69, similar to the report by Momtahen in her study while Bratos K reported that 65 patients were nulliparous[6]. This can be related to the culture.

In our study, the mean age at menarche was 14.77 years. In the study conducted by Bratos K et al, the age at menarche was under 13 years in 66% of patients, which can be explained by racial factors. Like Nesrin Reis, young age at menarche was a risk factor. About the age in first delivery, the greatest frequency in our patients was between ages 19 to 24 years. Similarly, Michael Parslov reported an inverse relationship between first delivery and detection of endometrial cancer[7].

CONCLUSIONS-

In this study, 28.5% patients suffered from sarcoma and cancer of endometrial was seen more in postmenopausal women with underlying conditions such as diabetes, hypertension and overweight. Times of delivery and abortion, younger age at menarche, age at menopause and at the first delivery appeared to be associated with endometrial cancer.

The etiologic and natural history of endometrial cancer is poorly understood. Incidence rates from countries with high-quality data should continue to be analyzed with respect to Histology and stage variation, as these types of analyses may provide clues to the pathogenesis of the disease.

Endometrial cancer has emerged as one of the commonest malignancy affecting women in western Maharashtra. Efforts should be made to detect the disease at early stage through population education with respect to epidemiological factors. Currently, a major goal of endometrial cancer research is to develop an effective test that can detect the disease at its earliest stages, which would ultimately result in decreased mortality.

Further studies are needed to elicit the causative factors responsible for the increase in the incidence of the disease and also their mechanism of action. Most ovarian cancers are environmental in origin and therefore in principle preventable.

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