Association of Reproductive Events as Risk Factors for Breast Cancer Cases in Mangalore (South India)

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Background

Incidence of Breast Cancer is rising alarmingly all over the world, and India is no exception. Reproductive risk factors such as age at menarche and menopause, age at first pregnancy and the parity of the woman are considered contributory.

Aims & Objectives

To find out the association of reproductive events as the risk factors for developing breast cancer.

Material & Methods

Breast cancer cases at the Kasturba Medical College Hospital from January 2008 to December 2010 were recorded in this retrospective study. Data regarding their age at menarche, first pregnancy and at menopause, along with parity was collected and analyzed from a total of 371 case files. Age distribution charts were made for each category. Early age at menarche was considered to be less than 14. For age at first pregnancy the following categories were made, <20 years, >20 - <25 years and >25 years (latter two having higher risk). Excluding the

nulliparous women, the others were categorized into two groups on the basis of their parity i.e. parity <2 or >2. For age at menopause the age groups were divided into <42 years, >42 - <47 years and > 47 years (latter two having higher risk).

Results

A total of 276 case files were seen out of which majority (96%) of the females had attained early menarche. Only 10% of the women (24) had conceived before the age of 20 out of a total of 241 cases observed. For the 181 case files with data on age at menopause, it was analyzed that 145 females (80%) attained menarche after the age of 42. All these risk factors had a positive correlation with the occurrence of breast cancer. In addition, it was seen that 62 women were nulliparous, and out of those who had conceived, only 28% had parity greater than 2.

Conclusions

There is a positive correlation of age at menarche, first pregnancy and at menopause with the incidence of breast cancer.