



Reproductive factors and breast cancer risk, A case control study

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Abstract

Introduction and Rationale

Breast cancer is the most common malignancy among the women of Kerala, Oestrogen exposure to breast has been explained as the association of Reproductive factors as risk factors for breast cancer.

Objective:

To determine the strength of association between reproductive factors like age of menarche, age at first live birth, number of children, duration of breast feeding , OCP use and breast cancer risk among women attending a tertiary care cancer center in south India.

To determine the strength of association of duration of unopposed exposure of oestrogen to breasts.

Materials and Methods

Un matched Case control study conducted among 660 newly detected breast cancer patients admitted for surgery

at Regional cancer center Thiruvananthapuram in 2003-2004 period and 920 controls selected from hospital and community.

Results

Mean age of cases 47.79yrs and controls 44.77yrs. Age at first live birth, number of children and duration of breast feeding showed significant association. Age of menarche did not show significant association with breast cancer risk. Duration of unopposed exposure of estrogen to breast has been calculated as the period between age of menarche and age at first live birth. Mean duration for cases was 9.78 yrs and for controls was 7.96yrs. Odds Ratio was also found out which shows that those with duration of more than 20 years has a 3.9 fold risk for developing breast cancer compared to those with duration of less than 10 years.

Conclusion

Duration of unopposed estrogen exposure is proved to be a risk factor of breast cancer even though the association age of menarche is not statistically significant [OR=1.209 (95%CI—0.863-1.695)]. Age of women at her first live birth has a significant association to breast cancer risk. Breast feeding more than 18months gives protection against breast cancer.

Keywords

Breast cancer, risk factors, reproductive factors, Duration of unopposed exposure of oestrogen to Breast
