

ASSOCIATION OF REPRODUCTIVE AND MENSTRUAL FACTORS IN RELATION TO PREMENOPAUSAL AND POSTMENOPAUSAL BREAST CANCER

J.K. DISANAYAKE*, M. CHANDRASEKERA*, C. RATNATUNGE**,
AND D.B. NUGEGODA***

Department of Anatomy, **Department of Surgery, *Department of Community Medicine,
Faculty of Medicine, University of Peradeniya*

Breast cancer which is a heterogeneous disease is the commonest cancer among Sri Lankan women. There is a strong interplay between exogenous and endogenous factors in the causation of breast cancer. Main risk factors related to breast cancer are family history and endogenous and exogenous hormones. Based on experimental, epidemiological and clinical studies, the ovarian hormones are strongly implicated in the development of the disease. These hormones influence normal breast cell growth and development. Prolactin is considered as a possible important factor in the development of breast cancer because it is essential for the development of the mammary gland and lactation. Lactation reduces breast cancer risk by reducing the cumulative number of ovulatory menstrual cycles following a completed pregnancy thus reduce the exposure to oestrogen. Menstrual and reproductive factors may be differently associated in the causation of premenopausal (early onset) and postmenopausal (late onset) breast cancer, as they occur in two different hormonal environments. Therefore, menstrual factors and reproductive factors may be used to measure the differences in the exposure to ovarian hormones.

This study is carried out to determine the association of menstrual and reproductive factors among Sri Lankan patients with premenopausal and postmenopausal breast cancer

Data regarding the reproductive and menstrual characteristics was collected from 48 patients attending the general surgical clinic at the Teaching Hospital, Peradeniya and at the oncology unit Kandy. The data was analyzed using SPSS.

There was no significant difference between pre and postmenopausal breast cancer patients in relation to age at menarche, menopause, age at first childbirth and the period between menarche and menopause. The average cumulative duration of lactation (in months) in premenopausal breast cancer patients (47 ± 38.6) was significantly longer ($p \leq .05$) when compared with the postmenopausal breast cancer patients. (21.3 ± 23.4).

Results of the present study in a Sri Lankan group suggest that a longer duration of lactation may not be associated with a reduction of risk in premenopausal breast cancer.