907/A/Poster

Assessing the impact of known risk factors of breast cancer, on breast cancer specific survival

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Breast cancer continues to be a major cause of death among women in Sri Lanka. There are established risk factors for the development of breast cancer but their effect on the breast cancer specific survival (BCSS) of the disease is not clear. Therefore, this study was designed to explore the impact of established risk factors of breast cancer on the BCSS of breast cancer patients in the Southern Province of Sri Lanka.

This was a retrospective study which included all breast cancer patients who had sought the immunohistochemistry laboratory services of the Department of Pathology, Faculty of Medicine, University of Ruhuna, Galle from May 2006 to December 2012. A pre-tested, interviewer-administered questionnaire was used to gather information on risk factors. The BCSS time was calculated from the date of diagnosis of the disease to the death from breast cancer or death with breast cancer using the Kaplan-Meier model. Univariate Cox-regression analysis was performed with 95% confidence intervals and the impact was examined using hazard ratio (HR).

A total of 944 breast cancer patients were included. The mean age was 52.66 years (SD ± 11.17). The five-year BCSS of the study population was 78.8%. The median survival time was 120 months. Univariate analysis of risk factors of breast cancer in patients who have developed breast cancer indicated that a family history of any cancer (HR=1.23, CI=0.89-1.69), family history of breast cancer (HR=1.397, CI=0.895-2.182), younger age at menarche (HR=1.38, CI=0.79-2.42), older age at menopause (HR=1.798, CI=0.45-7.191), being non lactated (HR=1.06, CI=0.73-1.54), menopausal state (HR=1.06, CI=0.74-1.53) and age at first full term pregnancy of >30 years (HR=0.923, CI=0.549-1.552) had no significant correlation with the BCSS ($p>0.05$). The overall survival was similar in parous and nulliparous women (HR=1, CI=0.68-1.52). An improved survival was observed for patients who had never used oral contraceptive pills (HR=0.65, CI=0.36-1.13). In conclusion there was no impact of the established risk factors of breast cancer on the BCSS of the cohort of patients studied.

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