Do pre-diagnostic drinking habits influence breast cancer survival?

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ABSTRACT

Aims and background. Alcohol consumption increases the risk of developing breast cancer and may also be associated with late diagnosis, recurrence, distant metastases and death. Many studies have examined the role of alcohol as a risk factor for the development of breast cancer, but very few studies have addressed the role of alcohol as a prognostic factor for survival among women diagnosed with breast cancer. The aim of this study was to investigate the survival of women with breast cancer in relation to pre-diagnostic alcohol intake and other factors known to influence prognosis.

Methods. We analyzed data for 264 women in the EUROCare and ORDET studies who were diagnosed with breast cancer from 1987 up to 31 December 2001 and for whom information was available on follow-up, stage at diagnosis, HER-2 and hormone receptor status, and pre-diagnostic dietary alcohol intake, categorized as zero (0 g/day, non-drinkers), moderate (up to 13 g/day, about 1 serving) and high (>13 g/day). Ten-year relative survival was estimated using the maximum-likelihood approach. The excess risk of death within 10 years of diagnosis was modeled by level of alcohol intake, adjusting separately for age, stage, body mass index and tumor subtype.

Results. Ten-year relative survival was lower in women who drank more than 13 g/day (65%; 95% CI, 47-78) than in non-drinkers (88%; 95% CI, 75-95). The excess risk of death within 10 years was significantly higher in women who drank more than 13 g/day than non-drinkers (relative excess risk, 4.13; 95% CI, 1.69-10.10) and was not altered by adjustment for other prognostic factors. The excess risk within 10 years was higher for women with a body mass index of 25 kg/m2 or higher (relative excess risk, 2.20; 95% CI, 1.01-4.70) and higher for those with more advanced disease.

Conclusions. Women who drank more than 13 g alcohol per day had lower survival than non-drinkers. The excess risk of death within 10 years of diagnosis was unaffected by other known risk factors. High alcohol consumption may be an adverse prognostic factor for breast cancer.

Key words: alcohol consumption, breast cancer, prognostic factors, survival.

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