

Int J Cancer. 2011 Apr 15;128(8):1929-34. doi: 10.1002/ijc.25770. Epub 2011 Jan 12.
Alcohol consumption and risk of glioblastoma; evidence from the Melbourne Collaborative Cohort Study.

Baglietto L, Giles GG, English DR, Karahalios A, Hopper JL, Severi G.
Cancer Epidemiology Centre, The Cancer Council of Victoria, Melbourne, Australia.

Abstract

Despite the brain being highly susceptible to the action of alcohol and, therefore, potentially susceptible to its carcinogenic effects, it is not clear whether alcohol consumption is associated with risk of glioblastoma. We analyzed data from 39,766 participants of the Melbourne Collaborative Cohort Study recruited in 1990-1994 and followed to the end of 2008 for an average of 15 years. Incidence of glioblastoma of the brain was ascertained via linkage to the Victorian and other State cancer registries in Australia. During a structured face-to-face interview at baseline we elicited each participant's history of alcoholic beverage consumption during the current decade at baseline. We used Cox regression models with age as the time metric, adjusted for country of birth, sex, total energy intake, educational attainment and coffee consumption to estimate hazard ratios (HR) and corresponding 95% confidence intervals (CI). A total of 67 glioblastomas was diagnosed in the cohort during follow-up. The HRs associated with each additional 10 grams per day of alcohol intake was 1.16 (95% CI, 1.05 to 1.29; p for linear trend = 0.007). Compared to lifetime abstainer, the HR for glioblastoma associated with alcohol consumption were 1.07 (0.55 to 2.10) for 1 to 19 g/day, 1.79 (0.81 to 3.95) for 20 to 39 g/day, 3.07 (1.26 to 7.47) for 40 to 59 g/day and 2.54 (0.92 to 7.00) for 60 or more g/day. Alcohol consumption at baseline was associated with the risk of glioblastoma in a dose-response relationship.

Copyright © 2011 UICC.

PMID: 21344375 [PubMed - in process]