

Milk Drinking and Risk of Stroke Mortality: a Propensity Score Matched Survival Analysis

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Background

Studies examining the association of milk consumption and risk of stroke have produced inconsistent results.

Objective

We compared risk of stroke mortality among milk drinkers and non-drinkers in the JACC study.

Methods

Subjects were divided by self-reported milk drinking status. Age, BMI, smoking, drinking, education, exercise, sleep, health checkup, history of diabetes, liver diseases, and hypertension were used to calculate a propensity score. Subjects were matched with a 1:1 ratio, by applying the nearest neighbor matching method. Cox proportional hazard model was used to evaluate the hazard ratio (HR).

Results

2075 deaths from stroke were confirmed during 19.3 years of follow-up. The HR (95% CI) for milk drinker against non-drinker in men was 0.85 (0.73-1.00), and 0.63 (0.49-0.81) for risk of total stroke and cerebral infarction mortality.

Discussion

We found reduced risk of death from total stroke and cerebral infarction in milk drinker only in men. Although the the baseline differences between milk drinkers and non-drinkers were balanced, information on milk intake and other potential confounders were collected only at baseline. The change of lifestyles during the follow-up may also lead to residual confounding.

Conclusion

Drinking milk more than once a month was associated with lower risk of mortality from total stroke and cerebral infarction among Japanese men.