SKIN CANCER (OTHER THAN MELANOMA)

COFFEE, TEA, CAFFEINE, AND RISK OF NON MELANOMA SKIN CANCER IN A CHINESE POPULATION: THE SINGAPORE CHINESE HEALTH STUDY

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Background: Observational studies on chemo-protective effects of caffeine against non-melanoma skin cancers (NMSC) are limited with absent data in Asian population.

Objective: We examined the relations between coffee, tea, soda, and total caffeine consumption and the risk of NMSC among middle-aged and older Chinese in Singapore.

Methods: We used data from the Singapore Chinese Health Study, a prospective cohort of 63,257 men and women aged 45–74 y at recruitment from 1993 to 1998. Baseline information on the consumption of caffeinated beverages, and lifestyle factors was obtained via in-person interviews. Incident NMSC cases were identified via linkage with the nationwide registry.

Results: After a mean follow-up of 17.6 y, 550 cohort subjects developed NMSC. Compared with those who drank coffee less than daily, the HR (95% CI) was 0.46 (0.24, 0.87) in those who drank ≥3 cups/d (P-trend = 0.04) for basal cell carcinoma development; and 0.36 (0.14, 0.92) (P trend= 0.002) for squamous cell carcinoma development. Compared with those who drank black tea less than daily, the HR (95% CI) in drinking daily was 0.75 (0.51, 1.08) (P trend= 0.002) for basal cell carcinoma development. Subjects with caffeine intake >=400mg/day had reduced overall NMSC development (HR 0.52. (0.29, 0.95) P trend = 0.004). Intakes of green tea and soda were not associated with the risk of NMSC in multivariable models.

Conclusion: The consumption of ≥3 cups of coffee/d , black tea daily or daily caffeine intake >=400mg/d may reduce the risk of NMSC in the general population.

Keywords: coffee, tea, caffeine, non- melanoma skin cancer, Chinese