OUTSTANDING RESEARCH AWARD - CLINICAL RESEARCH

OSR-CR-001

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

(1) Oh Choon Chiat, (2) Yuan Jian Min, (3) Koh Woon Puay, (3) Jin Aizhen

(1) Dermatology, Singapore General Hospital
(2) Hillman Cancer Center, University of Pittsburg Medical Center
(3) Centre for Clinician Scientist Development, Duke-NUS

Aims: While epidemiological studies in populations of European descent suggest possible chemo-protective effect of caffeine against Non Melanoma Skin Cancers (NMSC) specifically Basal Cell Carcinoma (BCC) and Squamous Cell Carcinoma (SCC); data in Asian populations are lacking. We examined the relations between coffee, tea, soda, and caffeine consumption and the risk of NMSC among Chinese in Singapore.

Methods: We used data from Singapore Chinese Health Study, a prospective cohort of 63,257 men and women aged 45–74 years at recruitment from 1993 to 1998. Multivariable Cox proportional hazard models were used to compute hazard ratio (HR) and 95% confidence interval (CI) associated with cancer risk.

Results: Coffee drinking was associated with reduced NMSC risk in a dose-dependent manner (P trend<0.0001); compared with those who drank coffee less than weekly, in those who drank ≥3 cups/day, the HR (95% CI) was 0.54 (0.31-0.93) for risk of BCC; and 0.33 (0.13-0.84) for SCC. Compared with non-drinkers, daily drinkers of black tea also had reduced NMSC risk (HR=0.70; 95% CI=0.52-0.94). Caffeine intake reduced overall NMSC risk in a stepwise manner (P trend=0.0025); subjects with caffeine intake ≥400mg/day had lowest risk (HR=0.59; 95% CI=0.34-1.04).

Conclusion: The consumption of caffeinated drinks such as coffee and black tea may reduce the risk of NMSC in a Chinese population.