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Letter to the Editor

Caffeinated beverages and cardiovascular disease ☆

I read with great interest the article by Voskoboinik et al. [1]. The authors conducted a review concerning the effect of caffeinated beverages on cardiovascular disease (CVD) and cardiovascular risk factors. They concluded that intake of tea and coffee, particularly in moderate doses does not appear to be harmful and may even be beneficial for CVD. The same result was also reported by Turnbull et al. [2] and I have a concern about their study.

First, Gaeini et al. conducted a prospective study to assess the effects of long-term intake of caffeine and habitual consumption of coffee and tea on the occurrence of cardio-renal events among population with low coffee and high tea consumption [3]. Adjusted hazard ratios (HRs) (95% confidence intervals [CIs]) of the highest tertile of tea consumption and caffeine intakes for cardiovascular disease (CVD) were 2.44 (1.40–4.27) and 2.22 (1.23–4.01), respectively. In contrast, adjusted HR (95% CI) of coffee intake for CVD was 0.58 (0.36–0.93). Furthermore, there were no significant effects of tea, coffee or caffeine intakes on hypertension (HTN) or chronic kidney disease (CKD). The authors concluded that coffee has a protective effect on incident CVD, and tea and caffeine were the risk of CVD events.

In contrast, Di Lorenzo et al. reviewed clinical trials on the role of tea and coffee consumption against CVD and CVD risk factors such as hypertension, diabetes mellitus, and hyperlipidemia [4]. They concluded that tea consumption was inversely or no association with CVD risk factors in normal weight subjects. In overweight subjects, there was an inverse correlation between tea consumption and CVD. In addition, moderate against non- or occasional coffee consumption had no effect or protective effects against CVD risk factors. As regard to coffee consumption, preventive effect on CVD has not reached conclusions.

I think that additional prospective or interventional studies are needed for conducting meta-analysis on the effect of caffeinated beverages on CVD.

References

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☆ Conflict of interest: The author declares no conflict of interest.

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