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Correspondence

Prehypertension associated with dyslipidaemia in young adults – Life-style & telomeres

Sir,

I read the article by Ray and colleagues[1] on the prevalence of prehypertension associated with dyslipidaemia and overweight in young military adults and also the commentary by Pappachan[2]. The high prevalence of prehypertension (79.8%) associated with a decrease in HDL cholesterol (67%) in young military adults in this study shows the need for intervention in their life-style as also noted by the authors[1,2]. It would be nice to know the quantity of salt and *ghee*/ butter intake per day by the subjects in the study[1]. Though majority of Indians eat home cooked food, there is an increasing trend to consume more often commercially prepared deep fried foods and carbonated soft drinks. Per capita consumption of fruits and vegetables in our country is low[3]. The longer duration of cooking in homes and restaurants can also result in destruction of antioxidants in food. In our country, there is high incidence of dental and periodontal disease in adolescents and in adults[4]. A positive association between periodontal disease and cardiovascular disease has been shown[5,6]. Desvarieux *et al*[7] have shown a direct relationship between the levels of subgingival periodontal bacteria and both systolic and diastolic blood pressure as well as hypertension[7].

Telomere dysfunction is an important factor in the pathogenesis of hypertension and atherosclerosis[8]. Telomere length is related to ageing and is inversely associated with risk of cardiovascular disease[8-10]. Telomere length is regulated by genetic and environmental factors[8]. Hypertension, diabetes mellitus, increased insulin resistance and oxidative stress are associated with shorter telomere length[9,10]. Ornish and colleagues[11] have observed that with intensive changes in lifestyle over a period of three months there was significant increase in telomerase activity, and decrease in low-density lipoprotein (LDL) cholesterol and psychological distress. A decrease in duration of sleep over many nights has been observed to increase blood pressure through increased salt retention[12]. Ignorance, underdiagnosis and suboptimal control are important factors for increased prevalence of hypertension in South Asia[13]. Adults who sleep less than five hours each night have an increased risk of developing hypertension[14,15]. As suggested by Pappachan[2], there is a need for urgent action to prevent lifestyle diseases in India.

Mahantayya V. Math
Department of Physiology
Mahatma Gandhi Mission's Medical College
Kamothe, Navi Mumbai 410 209, India
mathmv@rediffmail.com
mathmv@hotmail.com

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