

Lifestyle Change Programs in the Management of Hyperlipidemia

Dear Editor,

We read with great interest the article by Shawar et al.¹ in Oman Medical Journal. After a three-week proper health counseling, a significant decrease in cholesterol levels was seen in twenty six patients of all 44 hypercholesterolemic students. There was a significant relation between high total cholesterol (TC) and high or very high hsCRP. Coronary heart disease (CHD) is responsible for approximately 20 million deaths around the world annually. Hypercholesterolemia is the most common factor in causing CHD. Lipid metabolism can be disturbed in different ways. It is leading to changes in plasma lipoprotein function and/or levels. This by itself and through interaction with other cardiovascular risk factors may affect the development of atherosclerosis. Therefore, dyslipidaemias cover a broad spectrum of lipid abnormalities, some of which are of great importance in CHD prevention. Dyslipidaemias may be related to other diseases (secondary dyslipidaemias) or to the interaction between genetic predisposition and environmental factors, since overweight, obesity, and central obesity often contribute to dyslipidaemia. Overweight is defined as a BMI ≥ 25 to 30 kg/m^2 and obesity as a BMI $\geq 30 \text{ kg/m}^2$.² Elevation of total cholesterol and low-density lipoprotein-cholesterol has received most attention, particularly because it can be modified by lifestyle changes and drug therapies.

Some comments may be of interest. This study has shown a three-week lifestyle-change programs to be effective in improving in hyperlipidemic young patients. We think this study will contribute to the literature in this area. Primer hyperlipidemia is diagnosed after exclusion of secondary causes of hyperlipidemia as diet, smoking, obesity etc.

In contrast, primary hyperlipidemia points to a genetic basis. We think that it would be more accurate the definition of hyperlipidemia such as primer hyperlipidemia or due to diet or obesity to be made clearly. Furthermore, exclusion criteria is not clearly defined in this study. In addition, it is not clear how many patients were excluded from this study. Baseline values of body mass index is not defined in this study. If baseline values as body mass index were defined in the study, lifestyle changes could be speculated to affect to which extent in this study. These findings may contribute to the literature. We think if provided, the baseline values of body mass indexes of patients and the effect of lifestyle changes on the body mass indexes would further contribute to the study.

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References

1. Shawar SM, Al-bati NA, Al-mahameed A, Nagalla DS, Obeidat M, Al-mahameed A. Hypercholesterolemia Among Apparently Healthy University Students. *Oman Med. J.* 2012;27(4):274–80.
2. Reiner Z, Catapano AL, De Backer G, Graham I, Taskinen M-R, Wiklund O, et al. ESC/EAS Guidelines for the management of dyslipidaemias: the Task Force for the management of dyslipidaemias of the European Society of Cardiology (ESC) and the European Atherosclerosis Society (EAS). *European Heart Journal.* 2011;32(14):1769–818.