

LETTER

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Comment on “usefulness of atherogenic indices and Ca-LDL level to predict subclinical atherosclerosis in patients with psoriatic arthritis?”

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Dear Sir,

We read with great pleasure the important study evaluating the usefulness of atherogenic indices and carbamylated (Ca) low-density lipoprotein (LDL) (Ca-LDL) level to predict subclinical atherosclerosis in patients with psoriatic arthritis (PA)? by Tecer D et al. [1]. We have detected some important inaccuracies in their study's results to especially in the atherogenic index of plasma (AIP) values.

The AIP is the logarithmic transformation of the triglyceride (TG)/high density lipoprotein (HDL) ratio. AIP has been reported to be a better marker than the TG/HDL ratio and other conventional indices in predicting cardiac disease risk. When calculating AIP, TG and HDL values should be taken in mmol/l [2]. AIP was defined as a low cardiac risk of <0.11, intermediate cardiac risk of 0.11–0.21 and high cardiac risk of >0.21 [2]. When calculating the AIP value, they received TG and HDL levels in mg/dl [1]. Because of this miscalculation, both the patient and the control group appear to be at high cardiac risk in their study [1]. In our estimation, the mean AIP value of their patient groups was 0.079 and the control group AIP value was 0.107 (both values are a low cardiac risk). The statistical results may change when both groups' AIP value is calculated correctly.

According to current literature, AIP levels are not expected to be lower than the healthy control group in

severe rheumatologic diseases [3]. Were both groups' body mass index and waist circumference values matched? Were the comorbid conditions of the control group evaluated appropriately? The long-term effect of methotrexate (MTX) in reducing TG is known [4]. Most of their patients (76.9%) were taking MTX. Can MTX have affected the low AIP in the patient group than control?

TG level is a strong predictive marker for cardiovascular disease. There are many atherogenic LDL subtypes such as oxidized-LDL, glycated-LDL, cLDL and sLDL; small dense LDL (sLDL) is responsible for the main atherogenic effect [5]. The TG value reflects the sLDL value [3]. Therefore, TG value is very important in determining atherogenic risk. cLDL leads to endothelial dysfunction and increased reactive oxygen radicals production. There is no information in the literature that cLDL is more atherogenic than sLDL until now. According to current literature, we think that sLDL is more atherogenic than cLDL. Also, we think that AIP is a better predictive marker than classical atherogenic indices and cLDL in determining cardiac risk.

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Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

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