Visit-to-visit variability in low-density lipoprotein cholesterol

To the Editor,

We read the published article “Visit-to-visit variability in low-density lipoprotein cholesterol is associated with adverse events in non-obstructive coronary artery disease. Anatol J Cardiol 2019; 22: 117-24” with great interest (1). Gu et al. (1) concluded that “Among the patients with non-obstructive CAD, a higher visit-to-visit LDL-C variability is associated with increasing all-cause mortality or composite endpoints during the long-term follow-up”. We would like to share our ideas on this report. An important consideration is the quality control principle in LDL-C determination in laboratory medicine. For any clinical profile test in laboratory, variability in test results can naturally occur. The clinical laboratory has to control for with-in day and between-day variation, which is related to daily environmental conditions (2). The variation is not related to any pathophysiological process in the patient but to the analytic factors in the laboratory. LDL-C determination by different types of analysis in the same laboratory can simply result in variation of LDL-C results. Thus, Gu et al. (1) have to control for the described factors. LDL-C determination has to be performed using the same technique and analyzer. Different LDL-C assays can have different diagnostic properties and result in possible misinterpretation of results (3).

Nevertheless, with the described control, the between-day variation can still occur.

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References


Effects of colchicine on cardiac functions

To the Editor,

We have read with great interest the article published by Hidayet et al. (1), which was regarding the effects of Behçet’s disease (BD) on cardiac repolarization. It is emphasized in the study that Tp-e interval and Tp-e/QT and Tp-e/QTc ratios were

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Author’s Reply

To the Editor,

Thanks for your interest in our manuscript (1).

As stated in the letter, different LDL-C analysis methods or environmental conditions might result in LDL-C variability. To control for the described factors, the LDL-C levels of our enrolled patients were all determined by homogeneous assays. Besides, we conducted daily testing and quality control, such as reducing the LDL-C testing variation coefficient (CV) to less than 4%, deviation to less than ±4%, and total error (deviation +1.96 CV) to less than 12%.

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