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LETTER TO THE EDITOR

High-sensitivity C-reactive protein in obese children: Too complex a marker to use?

Proteína C reativa de alta sensibilidade em crianças obesas: um marcador demasiado complexo para utilizar?

To the Editor

We have read with great interest the recent article by Pires et al.[1] In this excellent study, the authors investigated the relationship between markers of adiposity, inflammation and adipokines in a Portuguese obese pediatric population. They concluded that leptin, adiponectin and high-sensitivity C-reactive protein (hs-CRP) may be used for cardiovascular risk stratification in obese children, as well as in the assessment of weight control programs. We thank and congratulate the authors for having addressed such an important issue. However, we have some concerns regarding this report, which we would like to share with you.

Firstly, high-sensitivity C-reactive protein is a sensitive reflector of low-grade inflammation and is not specific.[2] Low-grade inflammation is seen in many conditions such as periodontitis, cigarette smoking, diabetes mellitus, uremia, hypertension, low levels of physical activity, oral hormone replacement therapy, sleep disturbance, chronic fatigue, low alcohol consumption, depression and aging.[3,4] However, the authors did not mention these confounders, which may affect their conclusions.

Secondly, some medications may easily alter hs-CRP levels.[5] Therefore, it would have been useful if the patients included in the study had been described in greater detail in terms of medication with, for example, nonsteroidal anti-inflammatory drugs (aspirin, ibuprofen, and naproxen), statins and antibiotics.[6] This may lead to bias in patient selection.

Thirdly, there was a large numerical difference between the study group, which included 120 obese children and the control group, which included 41 healthy individuals; the difference was four-fold in some parameters. This may decrease the credibility of the study.

In conclusion, we are of the opinion that hs-CRP levels should be evaluated with other independent variables as mentioned above. Thus the credibility of the study can be increased.

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