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Metabolic effects of Ramadan fasting in patients at high risk of cardiovascular diseases.

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Abstract

BACKGROUND AND AIM: The effects of Ramadan fasting on health are a little controversial. The present study is aimed at evaluating the metabolic effects on a group of 517 patients with ≥ 2 cardiovascular risk factors over a period running from 2012 to 2014.

METHODS: Each patient was assessed at three visits: before, during, and after Ramadan. Demographical, clinical and biological tests were performed at each visit.

RESULTS: Metabolically, we noted a significant and discrete rise in blood glucose level (+1.2 mmol/L), triglycerides (+0.3 mmol/L), cholesterol (+0.12 mmol/L) and creatinine (+3 μ mol/L) during Ramadan. These disturbances decreased significantly after Ramadan. The same variations were observed among diabetics (n=323). However, there was a significant decrease in HbA1c after Ramadan (9.0% vs 7.6%, $p < 0.001$). Our findings also revealed there was no significant correlation between variations of metabolic parameters and dietary intake. No acute metabolic incidents were reported during the study period.

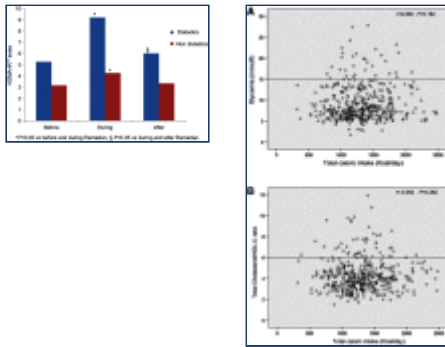
CONCLUSION: The current study showed that Ramadan is responsible for a transient but well tolerated disturbance of metabolic parameters followed by a significant post-Ramadan improvement. These changes did not seem to be directly related to dietary intake.

KEYWORDS: Ramadan; fasting; metabolic parameters

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