

Re: Kidney Function and Metabolic Profile of Chronic Kidney Disease and Hemodialysis Patients During Ramadan Fasting

Dear Editor,

I read the article "Kidney function and metabolic profile of chronic kidney disease and hemodialysis patients during Ramadan fasting" written by Al Wakeel,¹ and its the comment on that written by Einollahi and colleagues² with great enthusiasm. The holy and blessed month of Ramadan (in Arabic and Farsi language, *Ramadhaan*), the 9th month of the Muslim lunar calendar (*Hijra*), is of great value and significance among Muslims, representing the month of the descent of the Noble *Qu'ran*. For the Sunnis, Ramadan fasting (*as-sawm*) is considered one of the five Islamic pillars of the creed (*arkan al-Islam*), together with the faith declaration or profession (*as-shahada*), the five daily ritual prayers (*as-salah*), the pilgrimage to Mecca (*al-hajj*), and charity (*al-zakat*). For the Shiites, Ramadan is the 2nd practice of the religious branches (termed also as practices of faith).

Al Wakeel carried out a prospective study investigating the impact of Ramadan fasting on a group of 39 chronic kidney disease (CKD) and 32 hemodialysis patients willing to observe the religious duty, even though, being sick, they would be exempted. He noticed a number of significant changes in the blood clinical chemistry but no serious adverse event requiring hospital admission. Commenting on this research article, Einollahi and colleagues have rightly emphasized the novelty of Al Wakeel's study, in his effort to design a more comprehensive study, recruiting a larger sample than the previously published papers. The other scholars have indeed investigated small samples and therefore their findings are not generalizable to the entire population. Moreover, Al Wakeel carried out this study during the hot season (summer 2010) and also this represents a step further in the effort of providing evidence-based counseling to patients with CKD. In fact, the majority of the studies on the relationship between Ramadan and CKD has been done during cold seasons,³ making more difficult to interpret the results.

Given that CKD imposes a relevant burden in

the Arabic countries⁴ due to the high prevalence of CKD risk factors such as diabetes mellitus, obesity, and hypertension, and considering that in the extant literature there are very few comprehensive recommendations,⁵ systematic reviews,⁶ or meta-analyses,⁷ I urge more high-quality standardized protocols and randomized clinical trials to address this important topic of the impact of Ramadan on human health and pathologies. The effects of Ramadan fasting on kidney physiology is not a mere academic, theoretical, and speculative topic or of limit interest for only the Arabic countries. In a globalized society, the physicians have to face with issues like the management and treatment of CKD in Muslim patients that want to fast during Ramadan, since more and more Muslims live in the Western societies. Besides changes in the clinical chemistry and biochemistry, variables such as the length of fasting, the period of fasting (hot *versus* cold season) should be systematically studied, in order to provide patients with evidence-based counseling and advice. Moreover, physicians should make the effort to personalize the treatment for each CKD patient willing to fast during Ramadan, targeting their suggestions to the specific needs and reality.

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