

Re: Clinical and Biochemical Parameters of Hemodialysis Patients before and during the Islamic Ramadan Month

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Dear Editor,

We read with interest the article entitled "Clinical and Biochemical Parameters of Hemodialysis Patients before and during the Islamic Ramadan Month," which has published in your esteemed journal by Imtiaz and colleagues.¹ In this study, fasting effect on 282 hemodialysis patients was assessed by Imtiaz and colleagues during Ramadan month. Fasting was suggested by this study to be safe for hemodialysis patients since no significant changes in systolic blood pressure, serum potassium, and body weight were detected. Additionally, reduced levels of serum phosphorus and diastolic blood pressure were observed.¹

Also, fasting impact on renal replacement therapy during Ramadan month was studied in Iran and no significant changes in glomerular filtration rate and serum creatinine were discovered in the fasted and non-fasted patients before and after Ramadan month.^{2,3}

However, one pointed out that end stage renal disease patients should be considered based on how they began to break their fasts. He stated that they should drink water up to 1 L to 2.5 L so as to rehydrate their bodies and compensate their fluid depletions; however, they should avoid drinking an exceeding amount of liquid, which can result in an overload and fluid imbalance.⁴

Moreover, patients should choose not to begin with eating food with a lot of potassium for the risk of hyperkalemia, which is an overabundant potassium condition in the extracellular compartment.⁵ Not surprisingly, patients at the ending stage of renal disease are at a high risk for developing hyperkalemia since kidneys are greatly responsible for potassium excretion.⁶ Thus, restricting their intakes of high-potassium foods, such as melons, oranges, potatoes, beans, lentils, nuts, chocolate, several types of squash, and salt substitutes is a necessity.⁶ Limitation of dietary potassium for such patients in any circumstances,

especially when breaking their fasts during Ramadan month, is educated by renal dietitians who can play a critical role in this respect.

A definitive therapy for patients involved in severe hyperkalemia with electrocardiography changes at the end stage renal disease is hemodialysis.⁶ These patients should take into account the above-mentioned point when breaking their fasts since rapid potassium shifts from extracellular to intracellular fluid compartments would be stimulated by the mentioned therapy. Therefore, taking temporizing measures is important to acutely lower serum potassium since hemodialysis initiation frequently requires 1 to 2 hours.⁶

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REFERENCES

1. Imtiaz S, Salman B, Dhrolia MF, Nasir K, Abbas HN, Ahmad A. Clinical and Biochemical Parameters of Hemodialysis Patients Before and During Islamic Month of Ramadan. *Iran J Kidney Dis.* 2016;10:75-8.
2. Einollahi B, Lessan-Pezeshki M, Simforoosh N, et al. Impact of Ramadan fasting on renal allograft function. *Transplant Proc.* 2005;37:3004-5.
3. Einollahi B, Lessan-Pezeshki M, Pourfarziani V, et al. Ramadan fasting in kidney transplant recipients with normal renal function and with mild-to-moderate renal dysfunction. *Int Urol Nephrol.* 2009;41:417-22.
4. Al Wakeel J, Mitwalli AH, Alsuwaida A, et al. Recommendations for fasting in Ramadan for patients on peritoneal dialysis. *Perit Dial Int.* 2013;33:86-91.
5. Mahoney BA, Smith WA, Lo DS, Tsoi K, Tonelli M, Clase CM. Emergency interventions for hyperkalaemia. *Cochrane Database Syst Rev.* 2005(2):Cd003235.
6. Putcha N, Allon M. Management of hyperkalemia in dialysis patients. *Semin Dial.* 2007;20:431-9.