COMMENTARY

Ramadan Fasting and the Medical Patient: Consensus is Welcome but More Evidence is Needed

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Fasting Ramadan is one of the five pillars of Islam (1). Muslims all across the globe have strong emotional and spiritual ties to it and often devote this month to worship and adherence to good behavior. It is a time that calls for behavioral change for one month, the most discussed, from a medical standpoint, being abstinence from food and drink for a significant portion of the day. For the health care provider it is this part that generates the most controversy and unfortunately becomes subject to personal interpretation with a mixture of subjective beliefs and misconceptions. What is clear is that some patients with chronic and sometimes even acute illnesses make the decision to fast. The population-based Epidemiology of Diabetes and Ramadan 1422/2001 (EPIDIAR) study (2) demonstrated that among 12,243 people with diabetes from 13 Islamic countries, 43% of patients with type 1 diabetes and 79% of patients with type 2 diabetes fast during Ramadan. We also know that most of these patients have made this decision without consulting their health care provider. Approximately 10 to 15% of patients with chronic diseases seek medical advice on whether to fast or to be exempted for medical reasons.

The medical opinion regarding fasting in the chronically ill patient varies. The literal interpretation of the Quran clearly states that the sick are exempt from fasting thus leaving the definition of sickness to the health care providers, something even the imams have steered away from (3). Physicians have often taken the old wisdom of first do no harm. This principle is easier said than done but at what GFR level does fasting cause harm to a chronic renal failure patient? and have other concomitant conditions been taken account of?

There are very few patients, who may be selected and even fewer studies that deal with this topic. Are these studies done in the middle of summer with the heat and humidity or in the middle of winter? Any information regarding the safety of fasting with various medical conditions is welcome and a consensus statement from experts in the field may

be acceptable as an initial working document until support becomes available from large randomized controlled trials. The mini-symposium presented in the current issue of the Journal (4) is an excellent attempt to address many of the questions that health care providers with Muslim patients face. Should a patient with chronic renal failure fast? Should they fast if taking medication? At what urine concentrating ability is fasting considered to be safe? Does reduced food and fluid intake for 12 hours with antihypertensive medication cause a serious enough hypotension to compromise renal function? The studies quoted in the symposium are encouraging but not conclusive and the authors call for more studies involving larger patient populations and attempts at establishing predefined end points.

The section on sickle cell anemia and thalassemia addresses the patient with these aforementioned conditions who insists on fasting and provides guidelines for the health care provider in order to minimize the damage caused. It would be nice to ask health care providers what measures they would take if their sickle cell or thalassemia patients decided to fast and how active they would be to dissuade them from doing so.

The management of hypertension has become much easier in recent years with most drugs used prescribed on a once daily basis. Theoretically fasting should lead to better control of blood pressure because of less salt intake and the relaxation and peace of mind during the holy month. The studies quoted lend support to this idea, but a common condition like hypertension needs a large controlled trial looking at blood pressure control and complications of therapy. For the time being it is probably safe for the hypertensive to fast and the month of Ramadan provides an excellent opportunity to counsel patients with respect to diet, exercise, and smoking cessation. Taking medication during Ramadan can be tricky. There is acceptance that ear and eye drops, trans-dermal, creams, ointments, suppositories, injections (except for IV fluid administration), oxygen, and sublingual nitro-glycerin therapy do not nullify one's fast. Change of dose or schedule, or change to longer acting medications or other forms may be required. In general for many patients suffering from chronic conditions this is practiced without harm. Stable epileptics should endeavor to keep conditions the same. It will be a shame to lose control of the epilepsy and to spend months trying to optimize therapy again, epilepsy is a disease with many factors that can precipitate an attack and the threshold for glucose and magnesium or ionized calcium varies between individuals. I personally would be very worried about losing control of the epilepsy because of fasting. The patient with controlled heart failure and hypertension often fast and their medication adjusted accordingly however patients with compensated chronic medical conditions may very well decompensate when fasting and this is where fasting may become problematic.

The two common chronic conditions requiring lifelong therapy and control to minimize the complications are hypertension and diabetes. It is already mentioned that most stable treated hypertensive patients can fast without any real deterioration the same cannot be said for diabetes which is a heterogeneous disease divided into types 1 and 2 with type 1 being further subdivided into those who are brittle and those with hypoglycemic unawareness, those on conventional insulin therapy and others on multiple daily injections or pump therapy and finally those with concomitant hypertension, ischemic heart disease, neuropathy or nephropathy. Type 2 diabetes can be just diet controlled or treated with insulin. The questions posed by the ACCORD study and the increase mortality, which may be hypoglycemia-related may have relevance for the type 2 diabetic with ischemic heart disease and increased hypoglycemic risk (5). Monira AL-Arouj et al (6) reviewed the subject again in the August issue of Diabetes Care (7). Both the recent review and the previous one five years ago and the mini-symposium in this journal cover some important management issues in patients who decide to fast any way. The points are useful practical and consensus based but in this time and age where guidelines should be supported by evidence, we have to wait until concrete conclusions can be drawn from large randomized controlled studies. As practicing physicians with Muslim patients we must respect their wishes and minimize the harm, every patient with chronic disease should be counseled before Ramadan and should be asked to fill in a log book with important parameters recorded so every patient can act as his or her own advocate and determine areas of risk to be avoided for the upcoming year. It is welcome news that the Islamic conference is establishing a research centre in Turkey. Perhaps, the Islamic physicians interested in the medical aspects of Ramadan fasting should submit a proposal for a multicentre trial along the lines of the EPIDIAR (2), which allows us to base our medical advice on substantial scientific evidence. In general, fasting may be observed by many patients suffering from various chronic medical conditions, given that they receive individualized medical advice and adhere to the medications and dietary restrictions set forth by the health care provider.

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