CANCER THERAPY DURING RAMADAN

During the period of Ramadan, which is the 9th month in the Islamic calendar, Muslims practice daily fasting for the entire month, giving up all nourishment (including liquids) from sunrise to sunset. For healthy individuals, this period of fasting usually does not present a problem. However, such fasting among people who are sick, travellers, or pregnant or lactating mothers is potentially hazardous to their health, causing such conditions as electrolyte disturbances (e.g., increased sodium, potassium, and uric acid levels or decreased glucose concentrations) and dehydration-induced cardiovascular problems (1,2). It was reported previously (3) that individuals participating in the Ramadan fast experience transient cognitive and intellectual dysfunctions such as impaired concentration, attention, and work performance.

Researchers in many fields of medicine have investigated the feasibility of specifically modifying the time and type of drug treatment for fasting patients out of respect for their religious beliefs (4). Oncologists who practice in an Islamic country and treat patients with cancers, however, are faced with a difficult problem: Some of their patients are determined to abide by their religious custom of fasting during Ramadan despite the existence of limitations such as impaired performance status or ongoing therapy. Although cancer patients are exempt from fasting during Ramadan according to the holy Quran, they may be motivated to follow their religious beliefs. This increased motivation to fast is usually seen concurrent with changes in mood or self-esteem and with anxiety-related, depressive, or even nihilistic symptoms (i.e., skepticism regarding traditional values and beliefs). In our oncology institute, we occasionally see patients who are reluctant to accept conventional therapeutic modalities, who deny their own diseases, and who sometimes use over-the-counter drugs and/or folk remedies during Ramadan. Obviously, a persuasive, firm approach by physicians to convince their patients to refrain from fasting might work in some patients; however, it might cause other patients to distrust their physician, which in turn might lead to a breakdown in communication or a loss of the patient to follow-up, as we have unfortunately experienced on several occasions. Nevertheless, we try our best to persuade the patient with a curable disease, such as lymphoma or germ cell tumor, to continue to receive chemotherapy even during the time of Ramadan.

Further knowledge derived from studies of chronotherapy (5), a topic of current interest in which therapy is adapted to circadian rhythms, will undoubtedly lead to new therapeutic strategies in fasting patients. In the meantime, these patients should be preferably treated by a team made up of the medical oncologist, the psychiatrist, and perhaps a local religious authority figure.

References


Note

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Re: Reappraisal of Hepatic Arterial Infusion in the Treatment of Nonresectable Liver Metastases From Colorectal Cancer

The article by the authors and members of the Meta-Analysis Group In Cancer (1) was interesting and informative. Their results reaffirm those made by earlier studies regarding the increased tumor response caused by the hepatic arterial infusion (HAI) of fluorouracil (FUDR). In this context, we would like to call attention to some additional data relevant to this subject.

Takahashi et al. (2) studied the prognostic efficacy of HAI of fluorouracil (5-FU) in the treatment of residual hepatic recurrence of colorectal liver metastases in 51 patients. They found cumulative 5-year survival rates of 43.4% (with HAI) and 18.5% (without HAI) (P<.05), residual hepatic recurrence rates of 33.3% (with HAI) and 58.6% (without HAI) (P<.05), and extrahepatic recurrence rates of 14.1% (with HAI) and 70.9% (without HAI) (P<.001). This showed statistically significant survival advantages for patients treated by HAI of 5-FU compared with that of control subjects.

Burke et al. (3) studied the effect of variation in hepatic arterial anatomy on tumor response to HAI of FUDR for the treatment of colorectal liver metastases. Of the 74 patients in the study, 13 (18%) had aberrant hepatic arterial anatomy. Burke et al. found that the delivery of FUDR to metastases via the intrahepatic collateral circulation was less effective, and the median tumor volume was not significantly reduced (214 mL to 339 mL). However, in patients with a normal hepatic arterial anatomy, there was a significant (P<.001, Wilcoxon signed rank test) reduction in median tumor volume (329 mL to 148 mL).

Finally, Allen-Mersh et al. (4) compared quality of life and survival in 100 patients (51 treated by HAI of FUDR and 49 untreated control subjects). They found a significant (P<.03, logrank test) prolongation in overall survival in FUDR-treated patients compared with that in control subjects (median, 405 days versus 226 days). There were...