Medical Journal of the
Islamic Republic of Iran

Volume 16
Number 4
Winter 1381
February 2003

RAMADAN AND CARDIOVASCULAR DRUG USE

MJIRI, Vol. 16, No. 4, 243, 2003.

Ramadan is a holy month for Muslims who fast early in the morning up to the sunset in the evening. Ischemic patients tend to fast during Ramadan but they have doubt about their ability to fast and do not know how to take their cardiac drugs during this month. There are few reports in relation to Ramadan and diseases. Fedial et al. showed an increase in total cholesterol, thyroxine and uric acid and a decrease in total triglyceride, triiodothyronine, gastrin, and fasting insulin.[1] Aldouni reported a marked increase in HDL cholesterol and decrease in LDL cholesterol and total cholesterol during Ramadan.[2]

Maislos showed a marked increase in HDL cholesterol but no change in LDL, VLDL cholesterol and triglyceride during Ramadan.[3] Aldouni et al. in another report showed a beneficial effect of fasting during Ramadan on Apo AI, Apo B and LP-AI.[4] This study was undertaken on patients with ischemic heart disease to show how they should take their cardiovascular drugs during fasting in Ramadan.

Seventy-five cases of ischemic heart disease who were confirmed by angiography, enzyme rising, ECG and CABG were interviewed before and 15 days after fasting in Ramadan for the kind of drugs and the divided doses they took. Any history of hypertension, obesity, smoking habits, and patterns of angina before and during Ramadan was considered and recorded. According to the type of cardiovascular drug, the patients were divided into three groups. One group took their cardiovascular drugs in 2 doses, early in the morning and in the evening, the second group in a single dose early in the morning, and the last in a single dose in the evening. Nitrates, beta-blockers and calcium channel blockers were used in two separate doses and other drugs in a single dose.

The mean age of the 75 patients was 55.03 ± 9.48 years old, ranging from 36 to 72. Thirty-five patients were female and the rest were male. Twelve patients had a history for CABG, 40 for CAD and 33 for MI. Twenty-four patients had experienced previous anginal pains for less than one year and the rest for a longer time. The risk factor for hypertension, smoking, and hyperlipidemia was 41.3, 26.7 and 36% respectively. Duodenal ulcer and DJD were observed in 13.3% of patients.

Sixty-three patients took their cardiac drugs in 2 divided doses early in the morning and in the evening, seven in a single dose early in the evening, three in a single dose in the evening and 2 patients didn't take any drug at all. Forty-four percent of the patients didn't experience any chest pain, but 37.3% and 18.7% had experienced mild and severe chest pain during Ramadan respectively. ASA, propranolol, isosorbide, Nitrocantin, TNG, diltiazem, triamterene H, enalapril, digoxin, atenolol, and nifedipine were the most prevalent drugs they used.

In relation to the time of chest pain, 38 patients experienced no chest pain, but 14, 10, 8 and 4 patients had experienced chest pain in the evening after meals, before meals, all day long and early in the morning after eating, respectively.

There is always a need to educate patients about the correct doses and intervals of drugs during Ramadan. Ischemic patients are among those who are concerned not only about the doses but also about the severity and recurrence of angina, due to shift of blood from the cardiovascular to the GI system after breaking their fast.

In our study, there was not any severity or recurrence of angina in 48% of patients, and in 10.7% of patients angina was observed during the daytime. Our results showed that dividing drugs in 2 separate doses is beneficial and safe for ischemic patients.

M.J. ZIBAEENEZHAD,* M.D., AND O. BARATI, M.D.

From the Cardiovascular Research Center, School of Medicine, Shiraz University of Medical Sciences, Shiraz, I.R. Iran

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