## Diabetes Portends Higher Pancreatitis Risk

BY MIRIAM E. TUCKER

FROM THE ANNUAL MEETING OF THE EUROPEAN ASSOCIATION FOR THE STUDY OF DIABETES

STOCKHOLM – Both the prevalence and the incidence of pancreatitis were significantly greater among adults with diabetes than in those without, in an analysis of a U.K. database comprising more than 2 million general practice adult patients.

Rates of pancreatitis have been rising in the United Kingdom in recent years, along with increases in obesity and related conditions, including gallstones and hyperlipidemia.

Previous studies have identified a link between type 2 diabetes, antihyperglycemic medications, and pancreatitis, but these investigations have mainly utilized small population sizes and have not stratified patients by age and sex, Dr. Hamidreza Mani, an endocrinologist at

By sex overall, the incidence of pancreatitis among women with diabetes, compared with those without, was 1.95, whereas that rate for men was 2.23, according to the analysis.

the University of Leicester (England), said at the meeting.

Dr. Mani and his associates used the U.K. General Practice Research Database, one of the largest patient databases in the world, comprising 2.34 million adults. Of those, the investigators identified 75,322 patients with a history of type 2 diabetes. Among those, 574 (0.76%) also had a history of pancreatitis, compared with just 0.17% of the 2.2 million without diabetes, according to Dr. Mani and his colleagues.

This gave a crude hazard ratio of 4.5 for those with diabetes, compared with those without diabetes. After the researchers adjusted the data for age and sex, the odds ratio for a history of pancreatitis in those with diabetes, compared with those without, was 3.1, which was highly statistically significant, Dr. Mane said.

In all, 74,748 diabetes patients who were not found to have prevalent pancreatitis were followed forward for a mean of 3.1 years beyond a specified index date. Controls were followed for a mean of 3.2 years. There were 134 incident cases of diabetes among the diabetic patients and 1,975 among the controls, giving crude incidence rates of 58 and 27 per 100,000 population, respectively.

After adjustment again for age and sex, the relative risk of acute pancreatitis that was associated with diabetes was 1.47.

Striking age and sex differences were found. By sex overall, the incidence of pancreatitis among women with diabetes, compared with those without, was 1.95, whereas that ratio for men was 2.23.

Among women with diabetes who were 8-39 years old, the incidence of pancreatitis was nearly sixfold, compared with those without diabetes, whereas the rate among women with diabetes aged 50-59 years was actually a bit less than among those without (hazard ratio 0.86).

Among the men, Dr. Mani and his colleagues found that the greatest incidence

of pancreatitis occurred in the 50- to 59year age range, with a hazard ratio of 2.9, compared with men without diabetes

In diabetic men older than 80 years of age, the incidence of pancreatitis dropped to just half that of nondiabetic men (HR 0.53).

The reason for the difference between men and women in the incidence of pancreatitis is unclear. Hormonal and other physiologic differences may account for some of the difference, but not for the sixfold increase among young women, Dr. Mani commented.

The overall pancreatitis incidence of 27.4 per 100,000 among patients with diabetes in this database is far greater than the 10 per 100,000 U.K. incidence that was reported in 1998, he noted.

Dr. Mani stated that he had no disclo-

