GALLSTONE DISEASE (GD) AND RELATED RISK FACTORS IN A LARGE COHORT OF DIABETIC PATIENTS

Background and Aim: Data concerning the actual prevalence of GD in diabetics remains controversial, mainly as regards the risk factors related to GD formation. Thus, present series was aimed to assess GD prevalence and possibly related risk factors in a large cohort of consecutive diabetics.

Patients and Methods: During a 24 month period 1337 consecutive diabetics (710 male, 627 female, mean age 63±SD11 and 65±SD11, respectively) with DM were enrolled. Of them, 1235 (92%) had DM type 2 and 102 (8%) type 1. Ultrasound liver scan was done in fasting conditions with a 2.5 MHz transducer. GD was defined as the actual presence of stones or the lack of gallbladder due to cholecystectomies for gallstones performed at least one year after the diagnosis of DM. Statistical analysis was done by logistic regression analysis.

Results: A total of 332 patients (25%) had GD: in detail 261 had actual stones and 71 previous cholecystectomy. The prevalence of GD was higher in females (20% vs 25%, p<0.001), increased with age (from 15 to 20 and 30% in patients aged ≤ 40, 41-65 and >65 years, respectively, p<0.001) and BMI (from 24 to 30 % in those with a BMI normal or ≥ 30, respectively, p<0.001). In addition, GD frequency was significantly higher in patients with family history of GD (31% vs 23%, p<0.001). An inverse relation was observed between alcohol intake and GD prevalence which resulted of 28% in those with BDI of alcohol intake < 40 vs 20 and 24% in those assuming > 40 g/day (p<0.01). Type of diabetes, plasma levels of cholesterol and triglycerides, smoking habit, physical activity, weight reduction in the last year, use of oral contraceptive, parity and menopause were not significantly related to GD. At multivariate analysis sex, age, BMI and family history maintained their statistical significance.

Conclusions. Female sex, increase in BMI and anamnestic evidence of family history for GD, represent independent factors for gallstones in diabetic patients without difference according to the type of diabetes.