Hepatocellular carcinoma as a leading cause of cancer-related deaths in Japanese type-2 diabetes mellitus patients

Aim: We reported a cross-sectional study on causes of liver injury in Japanese type-2 diabetes mellitus (T2D) patients. We assessed overall and cause-specific mortality risk during follow-up of patients enrolled in JG 2013.

Method: Of the 5,642 Japanese T2D patients who visited T2D clinics of nine hospitals in the original study; 3,999 patients were followed up for an average of 4.5 years. Expected deaths in T2D patients were estimated using age-specific mortality rates in the general population (GP) of Japan. Standardized mortality ratios (SMRs) were calculated to compare mortality between T2D patients and GP.

Result: All-cancer mortality was significantly higher in T2D patients than in GP [SMR: 1.58; 95% CI: 1.21-2.06], whereas all-cause mortality was comparable between the groups (SMR: 1.10, 95% CI: 0.93-1.32). Among malignancies, hepatocellular carcinoma (HCC) conferred the highest mortality risk in T2D patients (SMR: 3.57, 95% CI: 1.66-7.67). HCC-associated mortality risk in T2D patients remained significantly high (SMR: 2.56; 95% CI: 1.15-5.68) after adjusting for high positivity rates of hepatitis B surface antigen (1.7%) and anti-hepatitis C virus (5.3%). In T2D patients with platelet counts <200×10^3/μl, SMR of HCC increased from 3.57 to 6.58 (95% CI: 2.33-18.60).

Conclusion: HCC-associated mortality risk was the highest among all cancers in Japanese T2D patients. Regular follow-up may be important for all T2D patients with platelet counts <200×10^3/μl for early detection of HCC.

Biography
Toshihide Shima has completed his MD from Kyoto Prefectural University of Medicine, Japan. He is the Vice President of Suita Hospital of Saiseikai, Imperial Gift Foundation, Inc. He has published more than 10 papers on Non-Alcoholic Steato Hepatitis (NASH) and has been serving as an International Member of American Association for the Study of Liver Diseases (AASLD).

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