

Esophageal clearance scintigraphy, in diabetic patients—a preliminary study

Binnur KARAYALCIN,* Umit KARAYALCIN,** Tamio ABURANO,* Kenichi NAKAJIMA,*
Kinichi HISADA,* Toshio MORISE,** Toshihide OKADA** and Ryoyu TAKEDA**

**Departments of Nuclear Medicine and **Second Department of Internal Medicine, School of Medicine,
Kanazawa University, Kanazawa*

The aim of this preliminary study was to evaluate the predictive value of esophageal clearance scintigraphy (ECS) in the diagnosis of esophageal autonomic neuropathy in diabetic patients without any esophageal symptoms. A single swallow ECS was performed in 12 diabetic patients and 15 normal volunteers, and esophageal transit time (ETT) and esophageal (Es) T 1/2 values were calculated. ETT and Es T 1/2 were found to be significantly prolonged in the diabetic group ($p < 0.01$ and $p < 0.05$, respectively). In this preliminary study, our results strongly suggest that ECS may be an important noninvasive diagnostic tool in the evaluation of diabetic patients with asymptomatic esophageal autonomic neuropathy.

Key words: diabetes mellitus, esophageal clearance scintigraphy, autonomic neuropathy