
Pancreatic scintigraphy with 75 Se-selenomethionine and hepatic scintigraphy with 99m Tc-colloid when necessary were performed in patients with abnormalities of digestive hormones such as gastrin, glucagon, and serotonin and with hypoglycemic attack.

We demonstrated hot areas by standard scintigraphy 15 minutes after injection of 75 Se-selenomethionine in 3 cases. In accord with the hot areas, angiography revealed hyperplastic vessels surrounding a tumor and its dense shadow in two of them, and extensive hyperplasia of vessels spreading over the gall bladder, head of the pancreas, and sight lobe of the liver and dense shadow of a tumor in the remaining one.

Pancreatic scintigraphy produced hot areas in pancreatic diseases such as non-functional islet cell tumor and circular pancreas.


Sequential scintigraphy was performed in 15 volunteers and 11 patients who have salivary gland disorder [4 chronic parotitis, 4 pleomorphic adenomas and 3 Sjogrens disease] using Tc-99m pertechnetate. In all subjects studies were carried out in the frontal view, with the subject in the supine position. Immediately after intravenous injection of 3-10 mCi Tc-99m pertechnetate, the digitized data were stored in computer for 60 minutes at 10 second intervals and later replayed to obtain time activity curve. Peak times of each time activity curve were obtained and the degree of the first slope of the time activity curve were calculated as a index of RI uptake. Result There were no remarkable difference in peak time between each groups without Sjogrens disease which shows delay of peak time. Index of RI uptake could separate each groups without chronic parotitis which did not correlate to other groups.

The uptake, concentration and excretion of Tc-99m-pertechnetate by the major salivary gland have been studied. Data were placed on MT at 30 sec. intervals for 30 min. after tracer injection and the next data following stimulation by sucking lemon juice were placed at the same intervals for 10 min. This technique was applied to 28 subjects and the time activity curves obtained from the major salivary gland were analysed. The patterns of the curves were deviced into the following four types; normal, hypofunction, obstruction and no function. Uptake rate, time to peak and excretion rate were calculated from the curves. Among these indicators excretion rate was considered most useful for quantitative evaluation of the salivary gland function.