G3. Peripheral Circulation

Significance of the Pancreas Scanning with Radio-Nucleides
To use of Selective Angiography

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A pancreas scan is one of the most difficult diagnosis in the abdominal organs. Some of these causes are absolute deficiency of vascularity in the pancreas, though a very little deposit of radio-nucleid in the pancreas, the liver overlaps on the pancreas and so on. According to it, a trial that radio-nucleides entered only in the pancreas was done, and the intraarterial pancreatic scan was performed after the catheter was introduced to the superior mesenteric artery and 200 to 300 μCi of ⁷⁵Se-Methionine was injected via the superior mesenteric artery through the catheter.

By this method, the above mentioned disturbance associated with the pancreatic scan should be prevented. A branch of the superior mesenteric artery are made with the gastroduodenal artery and fed to a part of the head of the pancreas.

If normal variation of vascularity of the superior mesenteric artery is not existent, radio-nucleides cannot be entered in the liver. Therefore the uninfluenced pancreatic scintigram with the liver could be obtained. Even though normal variation of the superior mesenteric artery exists, the accumulation of radio-nucleides into the liver is little. However the accumulation of radio-nucleides to the intestine is more increased than the conventional method, the intestine is separated from the pancreas.

Consequently a pancreas scan reading is not so difficult as the conventional method, especially in chronic pancreatitis and pancreas head tumor.

By this method 14 cases of the pancreas scan were performed often the selective angiography via the superior mesenteric artery. The radio-nucleides used ⁹⁹mTc-pertechnetate, ⁹⁹mTc-MAA, ⁹⁹mSe-Methionine. ⁷⁵Se-Methionine was the best radio-nucleid on the intraarterial selective angiography.