video tape recorder through the scintillation camera, one hour later play-back is done, and time-lapse accumulative curves are drawn by the minicomputer by subtracting the value of pancreas from the background values of regions of interest under the pancreas.

Results: In the present trials we selected 5 individuals with normal clinical findings, and the curves obtained coincided fairly well with \( C = K + A (1-C^{-0.1}) \).

We intend to study on this problem further with cases of tumors and inflammatory lesions in future.

**Significance and Limitation of 24 Hour Image in Scintigraphy of the Pancreas: Study of 189 Cases**

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In interpretation of a pancreas image, it sometimes is not easy to decide whether the filling defect suspected is true space occupying lesion in nature or not.

By comparing carefully the images of 20 minute and 24 hour after intravenous administration of \(^{75}\text{Se}selenomethionine, retention of radioactivity in the pancreas can be easily detected indicating narrowing and obstruction of the pancreas duct.

Pho/Gamma III scintillation camera was used for obtaining the pancreas image.

As an agent, 100 \( \mu \)Ci of \(^{75}\text{Se} \) selenomethionine was injected intravenously in each case.

In criteria of evaluation of images of the pancreas, we used “positive” for the persistent retention of radioactivity in the pancreas at 24 hour image and “negative” for complete removal of radioactivity from the pancreas based on good passage of pancreatic duct.

In 55 cases of malignant lesions of the pancreas were obtained 53 positive cases including 29 cases of cancer of the pancreas, 18 cases of metastatic cancer of the pancreas and 4 cases of cancer of the Vater’s papilla. False negative was 3.6\% (2/55) in them. In 134 cases of normal and benign lesion of the pancreas, 112 cases were negative except 16 cases of chronic and acute pancreatitis, 2 cases of pancreatic adenoma and 4 cases of past-surgical situation. False positive was 16.4\% (22/134).

The 24 hour image scintigraphy of the pancreas using scintilation camera and \(^{75}\text{Se} \) selenomethionine was useful for detection of narrowing and obstructing condition of the pancreas duct due to invasion of a malignant neoplasma or other organic change on the sound basis of persistent retention of radioactivity within the pancreas.