M. Gastrointestinal System (including Pancreas)

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COMBINED STUDY OF ULTRASOUND AND RADIO-
NUCLEIDE IN THE DETECTION OF THE PANCREATIC
CANCER. A.Kuwajima,T.Aburano,K.Ichiyama1
A.Tada,N.Tonami,K.Hisada. Department of
Nuclear Medicine,Kanazawa University.

Ultrasoundography was performed in con-
junction with pancreas scintigraphy in
sixty-three patients. In the radionuclide
study, both pancreas image with Se-75
selenomethionine and gastrointestinal image
with Tc-99m pertechnetate were obtained to
check the location of the pancreas head.
True positive rate of the radionuclide,
ultrasound and combined study was 95%, 88%,
94% respectively. True negative rate was
75%, 92%, 100%, and overall accuracy was
86%, 90%, 98% respectively. The false-
positive rate with our combined study was
clearly diminished. For instance, the area
of decreased radioactivity was visualized
in four normal pancreas body. It was
difficult to distinguish a tumor of the
pancreas body from the physiological
thinness. However, the thinness of the
pancreas body was easily confirmed by the
ultrasoundography. On the other hand, ultra-
sound revealed slightly enlarged pancreas
head in two normal cases. In these cases,
increased radioactivity at the pancreas
head was demonstrated corresponding to the
sonographic enlargement. In conclusion,
the diagnostic reliability of the combined
study was excellent because of its low
false-positive rate.

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SCINTIGRAPHIC EVALUATION OF PANCREATIC INVA-
SION OF STOMACH CANCER. N.Yui,F.Kinozita
and M.Koakutsu. Chiba Cancer Center Hospital,
Chiba.

In one hundred and fifty-one patients
with stomach cancers, pancreatic scintigra-
hies were performed preoperatively in order
to investigate possibility of diagnosis of pancreatic invasion.
Eleven out of 13 patients, who were confirmed
pancreatic invasion operatively, had shown
abnormal scintigrams, but only 8 of them
had been suspected to be invasive scintig-
raphically. Ninety-two out of 138 normal
pancreases showed normal scintigraphic find-
ings, i.e. false positives.

Normal scintigram may be considered to show
normal pancreas, but abnormal scintigram is
not always indicative abnormal pancreas in-
cluding invasion and further examinations
are necessary for more accurate diagnosis.

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SCINTIGRAPHIC DETECTION OF CHRONIC SMALL
BOWEL BLEEDING. T.Nakai.S.Matsumoto,T.Hidaka,
S.Murakami.K.Hamada and H.Ochi. Department
of Radiology,Nissel Hospital and Osaka City
University Medical School,Osaka.

Two cases of small bowel bleeding were
detected by delayed abdominal scintigraphy
with Tc-99m-HSA. Case one is 29 years old
male with anemia and melena. The upper G-I
series and barium enema were negative.
Serial scintigraphy was performed in the an-
terior position using a large field scinti-
camera after intravenous administration of
Tc-99m-HSA(20mCi). The initial scintigrams
were negative, but at 20 hours and 24 hours,
the scan became positive in the terminal ileum,cecum and ascending colon. At surgery,
the bleeding point of the myoma with ulcer
in the terminal ileum was seen along with
fresh blood clots in the cecum and ascend-
ing colon. Case two was 53 years old male
with anemia. Serial scintigraphy was per-
formed with the same method. The scintigram
at 1,3,5 hours were negative. At 24 hours,
the scan became positive in the ileum,as-
cending colon and transverse colon. At sur-
gery, bleeding adenocarcinoma was found in
the jejunum. The gastrointestinal radio-
graphs were negative in this case, too.
Delayed scintigraphy with Tc-99m-HSA could
be useful technique to detect chronic gas-
trointestinal bleeding.