

or platelet-rich Tyrode-albumin solutions during preparation. Documentation, however, is not provided.

Current techniques, which do not require prostaglandins, have achieved excellent recovery, on the order of 70–80%. Moreover, survival of platelets prepared without prostaglandins has been excellent.

Until improved recovery after addition of prostaglandins is documented, and until superior survival is achieved, we feel that a definitive recommendation regarding the use of prostaglandins in platelet preparation cannot be formulated.

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### Nonvisualization of Hepatoma with Tc-99m Hepatobiliary Agent

In a recent paper in the *Journal*, Utz et al. (1) reported a case of hepatoma in which the Tc-99m hepatobiliary agent was taken up by the primary tumor. There are other recent reports of similar nature in the literature (2,3). It would be unreasonable to believe that this test has a sensitivity of 100%, and we report a case of a proven hepatoma in which Tc-99m HIDA was not taken up by the primary tumor.

A 64-year-old man presented with a history of alcohol abuse, jaundice, right upper quadrant pain, and ankle edema. Two years before he had been diagnosed as having chronic persistent hepatitis proven by liver biopsy. On examination, the patient appeared jaundiced and emaciated, and the enlarged liver was firm and nodular, but nontender. The liver function tests were abnormal and alpha fetoprotein was positive. The fasting blood sugar was repeatedly low and ranged from 37–57 mg/100 ml. The patient also had slight hypercalcemia of 10.7 mg/100 ml and high total serum B<sub>12</sub> level. Hepatitis-B surface antigen was positive by radioimmunoassay.

A Tc-99m sulfur colloid scan of the liver and spleen showed hepatosplenomegaly and multiple photon-deficient areas throughout the liver. The distribution of the isotope was uniform in the spleen, but the intensity of the activity was greater than that in the liver. A Tc-99m HIDA cholescintiscan showed liver parenchyma distribution of the HIDA activity similar to that seen in the sulfur colloid scan. Uptake of HIDA was not visualized in the region of the tumor (Fig. 1).

Computed tomography showed ascites, marked enlargement of the right lobe of liver, and a large area of decreased density (CT density +20 to +32 Hounsfield units) almost replacing the right

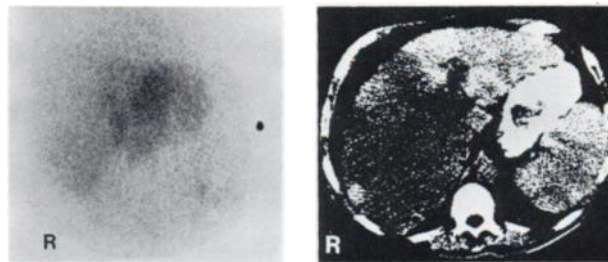


FIG. 1. Anterior scintiscan of liver (left) with Tc-99m HIDA. Concentration of radioactivity is limited to left lobe. CT scan (right) showing decreased density in right lobe.

lobe of liver. This enhanced with intravenous contrast infusion—CT density up to +52 Hounsfield units (Fig. 1).

Needle biopsy of the liver performed 6 wk before the HIDA scan showed a “moderately differentiated” hepatocellular carcinoma. The patient was considered inoperable and was started on doxorubicin therapy.

In the near future, as experience with HIDA increases, we believe it will become clearer which cases of hepatoma take up HIDA and whether HIDA can be used successfully as a hepatocyte-tumor-seeking agent. Further observations are needed. Possibly the degree of differentiation of the tumor is what determines HIDA uptake by hepatomas. Our case was “moderately differentiated” at the biopsy site but either this was not accurately representative, or the degree of differentiation may have changed in the 6 wk time lapse from biopsy to HIDA study.

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### REFERENCES

1. UTZ JA, LULL RJ, ANDERSON JH, et al: Hepatoma visualization with Tc-99m pyridoxylidene glutamate. *J Nucl Med* 21: 747–749, 1980
2. UENO K, HASEDA Y: Concentration and clearance of Tc-99m-pyridoxylidene isoleucine by a hepatoma. *Clin Nucl Med* 5: 196–199, 1980
3. CANNON JR JR, LONG RF, BERENS SV, et al: Uptake of Tc-99m-PIPIDA in pulmonary metastases from a hepatoma. *Clin Nucl Med* 5: 22–24, 1980

### ERRATUM

The correct Table of Contents entry for John A. Katzenellenbogen, et al. (*J Nucl Med* Vol. 22, No. 1, January 1981) is: 18α-[<sup>77</sup>Br] BROMOESTRADIOL-17β: A HIGH SPECIFIC-ACTIVITY, GAMMA EMITTING TRACER WITH UPTAKE IN RAT UTERUS AND INDUCED MAMMARY TUMORS. John A. Katzenellenbogen, Stephen G. Senderoff, Karen D. McElvany, H.A. O'Brien, Jr., and Michael J. Welch . . . 42.