jnm/case report

INCREASED FOCAL UPTAKE OF RADIOCOLLOID BY THE LIVER

A. Mikolajków and W. K. Jasiński

Institute of Oncology, Warsaw, Poland

Increased focal hepatic uptake of ^{99m}Tc-sulfur colloid was observed in a patient with malignant lymphoma of the mediastinum. Iodine-131-rose bengal scan of the liver was normal.

Pathological lesions of the liver, as visualized scintigraphically, usually have the appearance of cold tumors. We are stimulated by Coel, et al (1) to present the second case of the increased focal uptake of radioactive colloid by the RE system of the liver.

CASE REPORT

A 43-year-old male patient was admitted to the Institute with a mediastinal tumor and upper vena cava syndrome and dysphagia. Histological examina-

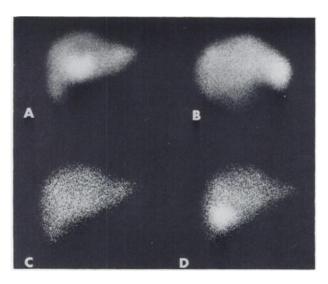


FIG. 1. A and B are anterior and right lateral liver scans obtained after **pom*Tc-sulfur colloid injection. There is hot spot situated at junction of right and left lobes near anterior surface of liver. C and D are anterior scintigrams of liver of same patient obtained on next day, 15 and 30 min after **1311-rose bengal injection. Only radioactivity in gallbladder became visible on 30-min scan.

tion of the tissue obtained by biopsy of the supraclavicular gland revealed "malignant lymphoma, possibly reticulosarcoma; however lymphoreticular type of thymoma can not be excluded".

A liver scan was obtained after intravenous injection of 2 mCi of ^{99m}Tc-sulfur colloid (2). Figure 1A shows a hot spot approximately 3 cm in diam, situated close to the anterior surface of the liver (Fig. 1B). No uptake of the colloid was visible in the tissue of the mediastinal tumor. The hot spot did not appear 15 and 30 min after ¹³¹I-rose bengal injection (Figs. 1C and D); however, radioactivity in the gallbladder became visible after 30 min (Fig. 1D).

The patient was examined again 4 months later at a second admission and identical scintigraphic images were obtained.

Angiographic examination was not possible because the patient was sensitive to the x-ray contrast.

In contrast to the case described by Coel, et al, we have not been able to show a decreased uptake of radioactive rose bengal at the place of the hot spot visualized by colloid scintigraphy. The similarity of both cases is in the presence of the superior vena cava syndrome.

We are unable to suggest any plausible etiology of the phenomenon described.

REFERENCES

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Received Aug. 18, 1972; original accepted Sept. 25, 1972. For reprints contact: A. Mikolajków, Isotope Dept., Institute of Oncology, i m Marii Sklodowskiej-Curie, Wawelska 15, Warsaw 22, Poland.