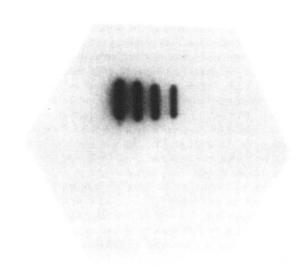
Fischer M, Hengstmann J, Vetter H: Phaeochromocytomainfluence of tumor catecholamines on scinyigraphy with <sup>131</sup>I-MIBG. J Nucl Med 25:P4-8, 1984 (abstr)

O. Caballero
J. Ferris
A. Verdeguer
C. Esquembre
V. Castel
La Fe Hospital
Valencia, Spain



# Activity per Unit Volume: A Pitfall in Predicting Size

TO THE EDITOR: A number of texts and articles indicate that dilatation of the hepatobiliary ducts may be suggested from findings on the HIDA study. This should be tempered by the well-known fact that an increase in radioactivity per unit volume in an object makes the image of an object appear larger (1). When there is stasis in the hepatobiliary tree, not necessarily accompanied by dilatation this condition is fulfilled as shown in Fig. 1. Figure 2 shows the image of four capillary tubes filled with the same volume of fluid but differing in activity per unit volume by factors of two. While the images suggest differing sizes, the objects are, in fact, identical.

#### FIGURE 2

Four identical capillary tubes filled with same volume of radioactivity but differing in specific activity. Capillary tube on left contains 1 mCi activity and each tube to right diminishes by factor of 2. Tubes are lying on flood-field phantom placed on surface of camera collimator. Hexagonal field indicates LFOV camera

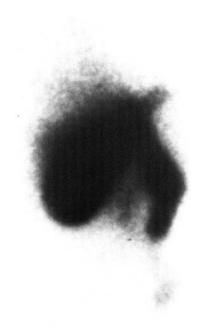
#### **FOOTNOTE**

\* Technicare, Solon, OH.

## References

- Rosenthal L, Damtew B, Kloiber R, et al: Difficulty of estimating biliary distention by radionuclide imaging. *Diag Imag* 1981; 50:154-158
- Rosenthall L: Cholescintigraphy in the presence of jaundice utilizing Tc-IDA. Semin Nucl Med 12:53-63, 1982

Fred S. Mishkin
Isaac Reese
Panukorn Vasinrapee
Phyllis Cunningham
Martin Luther King, Jr. General Hospital
Los Angeles, California



## FIGURE 1

Image 80 min after injection of 6 mCi [99mTc]DISIDA shows very intense activity in a apparently dilated common duct. This 62-yr-old woman had asymptomatic gallstones and normal sized common duct on ultrasound study performed within 18 hr. She had herpes zoster affecting right T-9 dermatome

## In Memoriam—Nathan A. Solomon (1922-1985)

TO THE EDITOR: Nathan A. Solomon, a longtime member of the Society of Nuclear Medicine, was Professor of Radiology and Director of the Division of Nuclear Medicine at Downstate Medical Center and Kings County Health Center, New York at the time of his death. Nuclear medicine represented his major interest and received from him an intense and sustained attention. He brought to it a breadth of view and a feeling for its inter-relations with other areas of medicine and of physical science. He was a professional chemist before he began the study of medicine, having received an MS degree in chemistry in 1947 and the PhD degree in 1955 from New