by Eq. (1a) for $B + C = 0$ is

$$R = \frac{DA}{A_E} \cong D\left(1 + \frac{2}{A\mu(E)}\right) \qquad (2)$$

which accounts for septal penetration at the edges of the collimator holes.

A comparison of the resolution calculated from each result is given in Table 1. (For a detailed explanation of the origin of the collimator parameters given in Table 1, see Ref. *1*.) It is seen that for a collimator designed for high-energy gamma rays (≧400 keV), the error in the resolution is 10% or greater for small source-to-collimator distances. This error is reduced for lower energy gamma and large source-to-collimator plus collimator-to-detector distances.

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FOCAL HYPERFIXATION OF RADIOCOLLOID BY THE LIVER

In recent years, several cases of focal hyperfixation of radiocolloid in the liver scan have been presented in the *Journal of Nuclear Medicine*. The reason for this hyperfixation could not be determined in most cases. We observed one with a "hot spot" in the liver scan which could be examined histologically.

A 37-year-old female patient consulted her physician for discomfort in the epigastrium. At physical examination there was a clearly delimited round and palpable mass. Blood chemistry revealed no pathologic findings except for a slight rise in alkaline phosphatase and SGOT. The patient was referred to us for a liver scan, which showed a hot spot, corresponding to the palpable tumor in the epigastrium. Angiographic examination was suggestive of a tumor in the liver (Fig. 1). Therefore, the patient was operated on and left lobectomy was carried out. The pathologist found a well-defined tumor with a diameter of 6 cm in the left lobe of the liver. Histologically, the tumor consisted of normal liver tissue with moderate fibrosis. Histologic diagnosis: hamartoma in the left lobe of the liver.

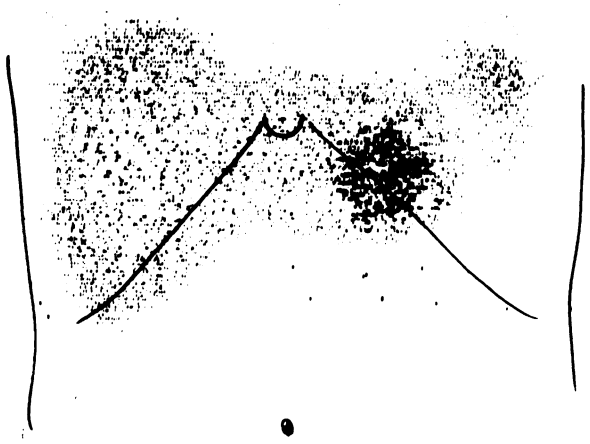

FIG. 1. Angiographic examination suggestive of liver tumor.

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EXPRESSION OF TISSUE ISOTOPE DISTRIBUTION

When tissue-distribution studies of labeled compounds are reported, the common method of expressing individual tissue concentration is as percent of administered dose per gram of tissue. To be meaningful, the size of the animal must be stated, since, obviously, a large animal will constitute a larger dis-