

this application was noted in a Letter to the Editor of the *British Journal of Radiology* (1). The technique that we use is similar to that reported by Tully, et al except that we instill the sulfur colloid and take gamma camera images prior to instilling the therapeutic radiocolloids. One can then evaluate the adequacy of distribution before the therapeutic dose is instilled, allowing one to avoid an unsatisfactory or potentially hazardous installation.

The first example demonstrates what we feel is an unsatisfactory distribution. Figure 1A is a posterior view of the patient's lower abdomen with the patient in the knee-chest position. This indicates that the activity is primarily located in the lower abdomen and pelvis. Figure 1B is an anterior view of the same region again demonstrating the confinement of activity to the lower abdomen. The lower marker indicates the level of the symphysis pubis. Figure 2 is a right lateral view of the lower abdomen of another patient indicating loculation of the sulfur colloid in the anterior abdominal wall or loculation in the peritoneal space. The linear activity is from an anterior abdominal wall marker.

In the first situation, we felt that we should limit the therapeutic radiocolloid to less than the usual

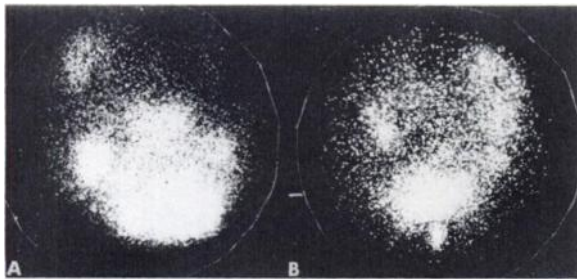


FIG. 1. Posterior view (A) and anterior view (B) of lower abdomen with patient in knee-chest position.

THE AUTHORS' REPLY

We would like to thank Charles Teates and William Constable for their comments. We were unaware of Dr. Constable's Letter to the Editor in the *British Journal of Radiology*.

We quite agree that the injection of ^{99m}Tc -sulfur colloid prior to the installation of the ^{32}P -chromic phosphate suspension should accurately predict the distribution of the chromic phosphate in the body

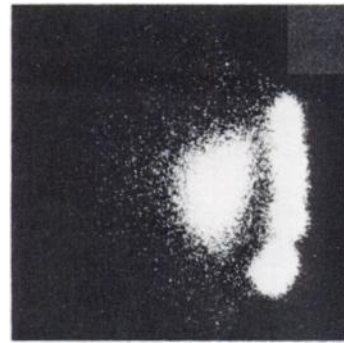


FIG. 2. Right lateral view of lower abdomen.

amount due to the uneven distribution in the abdomen. In the second situation, the therapeutic colloid was not instilled because this would result in a high local radiation dose to the anterior abdominal wall. A catheter was later surgically inserted in the abdomen and many adhesions were evident. The distribution was still not satisfactory and the therapeutic colloid was not instilled.

We agree with Tully, et al that ^{99m}Tc -sulfur colloid is a good agent for demonstrating the distribution of therapeutic colloids in the abdomen. We would recommend performing the diagnostic study prior to instilling the therapeutic colloid in what may be a potentially dangerous distribution.

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REFERENCE

1. VIGARIO GD, WETZEL RA, CONSTABLE WC: Use of ^{99m}Tc -sulfur colloid scan prior to intraperitoneal installation of radioisotopes for therapy purposes. *Br J Radiol* 43: 582-583, 1970

cavity being treated if one assumes that the two agents will occupy the same space and are distributed in a similar fashion.

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