TABLE 1. INCIDENCE OF ONLY SKULL AND EXTREMITY ABNORMALITIES DETECTED WITH ^{99m}Tc-Sn-HEDP IN NONOSSEOUS MALIGNANT NEOPLASMS

Bone scan indication	Total	Abnormal	Skull	Extremities
Breast	368	247	12 (5%)	14 (6%)
Lung	230	147	2 (1%)	14 (10%)
Prostate	191	119	2 (2%)	11 (9%)
Hodgkin's	58	29	0	1 (3%)
Lymphoma	42	16	0	2 (12%)
Cervix	41	23	3 (13%)	4 (17%)
Rhabdomyosarcoma	39	22	1 (4%)	6 (27%)
Colon	37	21	3 (14%)	2 (10%)
Kidney	35	21	2 (10%)	3 (14%)
Bladder	35	15	1 (7%)	0
Melanoma	30	17	5 (29%)	4 (24%)
Rectum	23	14	0	1 (4%)
Thyroid	14	6	0	0
Total	1143	697	31 (4%)	62 (9%)

abnormalities without abnormal axial uptake of the bone agent (^{99m}Tc-Sn-HEDP).

We have retabulated our clinical data to determine the number of cases in which the only abnormality was reported in the skull or the extremities (Table 1). The overall incidence for solitary skull uptake was 4% and that for solitary extremity uptake was 9%. For solitary uptake in the extremities, upper involvement was limited to the humeri (15%), with one report of a solitary abnormality in the hand. The remaining solitary abnormalities in the extremities (85%) were distributed 70% to femora and 30% to tibias or fibulas.

The 5–10% incidence of skull or extremity uptake without involvement of the axial skeleton reemphasizes the desirability of whole-body scintiscans.

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REFERENCE

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Cellular Site of $^{99m}TcO_4$ Secretion in the Stomach

I would like to comment on a letter to the editor by T. K. Chaudhuri (*1*) concerning the cellular site of the secretion of $^{99m}TcO_4$ in the stomach. The work of Meier-Ruge and Fridrich (*2*) was not quoted in its entirety. Their experiments not only showed selective secretion of pertechnetate by the parietal cells, but also a predominant secretion of iodide by the chief cells, with only small amounts of iodide being secreted by the parietal and mucus-secreting cells. This is astonishing in view of the many physiologic similarities betweeen iodide and pertechnetate. Because of this contrasting behavior of iodide and pertechnetate in the stomach, Meier-Ruge and Fridrich suggested that microautoradiography should be used with both tracers to distinguish parietal from chief cells.

I agree that further studies regarding the distribution of iodide and pertechnetate in the gastric mucosa are badly needed. A better understanding of the gastric excretion of pertechnetate might also offer an explanation for the disturbing observation that not all gastric-type mucosa contained in Meckel's diverticula are visualized by pertechnetate scanning (*3–5*).

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Reply

I appreciate Dr. Winter's comments on our article (*1*). Since our major interest was the cellular localization of $^{99m}TcO_4$ in the stomach, we did not feel it necessary to dis-

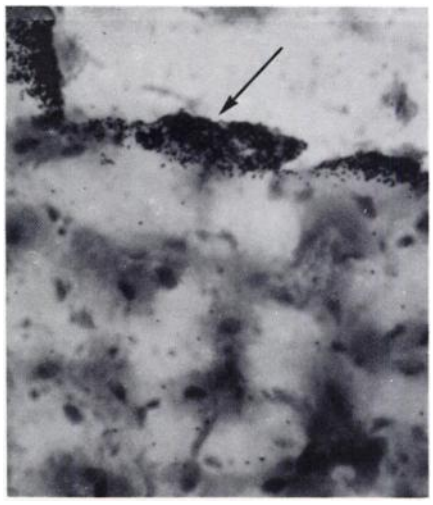

FIG. 1. Autoradiograph (×800) of gastric mucosa of mouse (taken 15 min after injection of ^{99m}Tc-pertechnetate) shows localization of grains predominantly in mucus-secreting cells (arrow) of surface mucosa. Parietal and chief cells show very few or no silver grains.