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W. J. BAIR

REPOSITORY

COLLECTION Intraesophageal

BOX No. 2947

FOLDER HSC 73-5

Date October 18, 1973

To Bill Bair

From K. L. Swinth *K*

Subject Intraesophageal Probe - Benefit to Subject

Iral conveyed the question concerning benefit to the subject in the proposed intraesophageal measurement to me this morning. Below I have listed the benefits with regard to measurement of material in the lymph nodes.

If we demonstrate that the activity is moving to the lymph nodes, we can state (assuming radiation damage to the lung including cancer is dose dependent) that the risk to the lung is decreasing. Thus the subject can be assured that the danger to his life sustaining lungs is decreasing. Although the risk to the lymph nodes would be increasing the lymph tissue seems to be relatively radioresistant. At any rate lymph nodes and associated tissue can be excised without the serious implications of lung removal.

Another potential benefit to the subject would arise in the case of lymph related disease (cancer). Demonstration of a significant deposition of activity in the lymph nodes (potential cause and effect) could help in receiving a favorable legal settlement in court thus providing monetary aid for the subject and his family. Hopefully such a circumstance will not arise, but one cannot deny that a favorable settlement would be of benefit to the subject.

If present research on therapeutic removal of deposited plutonium advances favorably, it will be necessary to know the site of deposition of the material since it is unlikely that removal therapies will have equal efficiencies for different body compartments. Knowledge of the deposition amount and site could be important in the subject's decision to undergo therapy and in the choice of technique.

The value to mankind is a little more general than that to a contaminated subject. Besides offering additional protection to each individual as a potential contaminated subject, the probe demonstrates

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increasing capability to deal with a potential hazard of the nuclear age.

Bill, although I could go on about real and possible benefits to the subject and mankind I think I have covered the major points. The possible confirmation of decreasing dose to the lungs, the demonstration of significant lymph tissue doses in legal actions and the knowledge of plutonium partitioning for therapy decisions are all of benefit to the subject.

I hope this will help. I have written other material on the general significance of the probe and I could go into more detail on the points I have outlined. I will wait to hear from you before further comment.