



BROOKHAVEN NATIONAL LABORATORY
 ASSOCIATED UNIVERSITIES, INC., UPTON, L.I., N.Y. 11973

MEDICAL DEPARTMENT

TELEPHONE: (516) 345- 3577

November 21, 1975

403732

Dr. James L. Liverman
 Assistant Administrator for Environmental
 Safety
 Energy Research and Development Administration
 Washington, D.C. 20545

Dear Jim:

The purpose of this letter is to acquaint you with a change in our conclusion regarding radiation etiology of thyroid cancer in the Marshallese population of Utirik who had been exposed to low doses of radiation from fallout. In 1969 one of the Utirik women had a thyroid tumor removed which was malignant. It was believed that this one case could well have been a natural occurrence and since no nodules had been detected in the Utirik children and only a normal incidence of benign nodules had developed in the adults I had advised the Congress of Micronesia, in response to questions submitted, that it was unlikely that any of the thyroid abnormalities noted in the Utirik population (158 people) were related to radiation exposure. As you know the subject of additional compensation for the exposed Marshallese is about to come up before our Congress. The Department of Interior is handling this matter. Of course the Congress of Micronesia is pushing for passage of such a bill and the questions asked me concerning various aspects of our medical findings were related to this.

Last month another thyroid tumor was removed from a 25 year old female exposed on Utirik at 4 years of age, the first tumor to be detected in the younger age group of that population. The diagnosis on this tumor has been controversial among nine outstanding thyroid pathologists - three favoring a diagnosis of cancer, two atypical benign adenoma and four undecided but willing to call it a premalignant lesion or cancer-in-situ. We have decided to call it cancer-in-situ and for statistical purposes classify it as cancer.

In order to obtain advice on chances that these two cancers in the Utirik group were related to their radiation exposure I visited Drs. Brian MacMahon and George B. Hutchison, at the School of Public Health at Harvard Medical School for review of the Marshallese data. Both of these men are experts in population statistics. They concluded that the "occurrence of 2 cases by chance is extremely unlikely". A summary of their conclusions is attached.

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Dr. James L. Liverman

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Unless you have any objections, I will write to the Department of Interior (Office of Territories) summarizing the above information. I will also send a copy to the Congress of Micronesia. These facts probably should be considered by them in their presentation of the compensation bill to our Congress.

Sincerely,

Robert A. Conard, M.D.

RAC:im
Encs.

Copies Dr. Burr
Dr. Marks