

- 280 A Prospective Study of the Leukemia Mortality of Children Exposed to Antenatal Diagnostic Radiography. A Preliminary Report. W. M. C. Brown and R. Dull. *Proc. Roy. Soc. Med.* **53**, 161-162 (Sept. 1960).

A survey was made of the mortality from leukemia of children exposed in utero to diagnostic x-rays. It was concluded that if a leukemogenic risk is incurred by prenatal x-ray exposure, the risk is very small. -- Nuclear Sci. Absts.

- 281 Practical Application of Radioactive Metals. J. N. Yarr, et al. *Bull. N. Y. Acad. Med.* **36**, 510-531 (Aug. 1960).

The transcript of a panel discussion on the practical applications of radioactive metals in medicine is given. The effects of radioisotopes on tissues; their therapeutic usefulness; some specific approaches used in isotope therapy; the properties that make isotopes desirable or undesirable; the control and care of malignant diseases through the use of radioisotopes; and the development of methods leading to more precise localization of radioisotopes for therapeutic purposes and resulting in a better understanding of the effects of radioisotopes should they contaminate body structures were discussed. -- Nuclear Sci. Absts.

- 282 Urine Radiography of Excreted Iodide. A New Renal Function Test. B. P. Grant and R. Wigg. *J. Am. Med. Assn.* **174**, 1304-1307 (Nov. 1960).

A new technique, excretory urine radiography, for estimating organic iodide excretion after its intravenous injection is simple and inexpensive. Its accuracy was proved by comparison with chemical and isotopic measurements of iodide excretion. It facilitates measurement of glomerular filtration. It adds to excretory urography an important needed feature or may be employed as a separate renal function test. The range of normal values is provisionally considered as those above 20% excretion of diatrizoate in 30 minutes. -- Nuclear Sci. Absts.

- 283 An Industrial Gamma Irradiator for Medical Supplies. J. H. Frankfort, S. Haram and S. Wallach. NYO-9433. Associated Nucleonics, Inc., Garden City, N. Y. 139 pp. (Feb. 19, 1960).

Criteria were developed for the gamma sterilization of medical supplies and pharmaceuticals. Preliminary design data and cost figures are presented for a gamma irradiator. Both Co-60 and Co-137 are considered as gamma sources. Photographs of a model of a proposed irradiator and diagrammatic sketches of design details are included. -- Nuclear Sci. Absts.

- 284 An Experimental Gamma Irradiator for Hospital Sterilization. J. H. Frankfort, S. Haram and S. Wallach. NYO-9432. Associated Nucleonics, Inc., Garden City, N. Y. 94 pp. (March 7, 1960).

Preliminary design data are presented for a gamma irradiator for use as an experimental hospital sterilizer. A photograph of a scale model and schematic sketches of design details are included. Initial-cost and operating data are considered for both Co-60 and Co-137 sources. Among the materials particularly suited to gamma sterilization are bone transplants, rubber gloves, dressing packs, petrolatum gauze, and mattresses. -- Nuclear Sci. Absts.

- 285 Environmental Radioactivity Prior to Nuclear Power Plant Operation. J. V. Nehemias, G. H. Whipple and N. C. Kuthary. *J. Am. Water Works Assn.* **52**, 1291-1302 (Oct. 1960).

When any major nuclear production facility is planned, the possibility that radioactive materials may be inadvertently released into the environment must be considered. Evaluation of the impact of plant operation on the levels of radioactivity in the environment implies know-