988 Trauma and Vascular Diseases Arising from Cold Injury. H. E. Tebrock and M. M. Fisher. Ind. Med. & Surg. 29, 334-337 (July 1960).

The authors have reported the relation of cold injury to peripheral vascular disease. They have classified many subgroups of cold injured extremities into one category for simplicity and ease of approach to therapy. They have attempted to give a working basis for the treatment of cold injured extremities. They have indicated that with the proper protective clothing, the incidence of cold injured extremities can be markedly diminished. They have presented working criteria to evaluate effects of cold injury as a factor in the aggravation of pre-existent peripheral vascular disease.

RADIOACTIVITY AND X-RADIATION

989 Radiation Necorsis of the Ossicles. J. Gyorkey and F. J. Pollock. A.M.A. Arch. Otolaryngol. 71, 793-796 (May 1960).

The patient presented here was a 17-year-old youth, who complained, in 1958, of progressive hearing loss in the right ear since 1953. In 1951, the patient had received a total dose of 9,900 r to the head for an ependymoblastoma of the floor of the fourth ventricle. It has been previously shown that radiation of bone over a long period causes vascular changes. The vascular supply of the long process of the incus is known to be fairly meager. The hearing loss that developed was of a conductive type, consistent with interruption of the ossicular chain or fixation of the strapes. Surgical exploration revealed that the long process of the lenticular process of the incus were replaced by a fibrous band. This could have been the end-result of an aseptic necrosis due to the radiation effect on the vascular supply of the long process of the incus. Hearing was restored to a useful level in the speech frequencies by means of a myringostapediopexy. Disappearance of the long process and lenticular process of the incus has been found at surgery in the presence of chronic otitis media, with or without the formation of cholesteatoma. The absence of these processes has been also reported many years after a skull fracture with injury of the temporal bone; and congenital malformation of the ossicles frequently has been recorded in the literature. However, destruction of the incus due to massive radiation has not been previously reported. -- J. Am. Med. Assn. Abstr.

990 Radioisotopes in Science and Industry. Atomic Energy Commission. 188 pp. (Jan. 1960). For sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. $1.25.

The contributions of radioisotopes to the sciences, agriculture, medicine, and industry are reviewed briefly. Separate chapters deal with the progress of research in agriculture and other biological fields; the applications of radioisotopes and radiation to medical diagnosis and therapy; the benefits of isotopes in chemical and physical research; examples of existing industrial uses; some problems of industrial development and studies aimed at solving them for broad segments of the economy; the potential of high-intensity radiation in industrial processes; the training program that assists broader uses of radioisotopes; trends in isotope production, distribution, and pricing; and safeguards to health and safety in the use of radioisotopes and radiation. -- Nuclear Sci. Abstr.

991 Some Problems Regarding Permissible Doses with Radioactive Isotopes. Edith H. Quimby. J. Nuclear Med. 1, 14-22 (Jan. 1960).

It is pointed out that for any particular situation it is necessary to weigh the expected good against the feared harm and come to a decision. This is also true of radiation risk. There is no doubt that x-rays and radioactive materials have made marked contributions to our health

IN RE: ABRAMS November 1992

03120641