

significantly more radiological changes of lumbar disc degeneration and possibly more osteo-arthritis of the knees than either manual or office workers, and there was a significant association between these radiological changes and attacks of pain in the lumbar-sciatic distribution and the knees. The miners also showed more arthritic changes in other joints, such as the elbows and hips. Almost no association was found between complaints of pain and emotional stability, and it is concluded that degenerative joint changes are mainly responsible for the pains mentioned, which had been found to be especially prevalent among miners.

-- Cond. from Authors' Summary

RADIOACTIVITY AND X-RADIATION

- 1015 Health Physics and Medical Aspects of a Strontium 90 Inhalation Incident. F. P. Cowan, L. B. Farrabee and R. A. Love. *Am. J. Roentgenol. Rad. Therapy and Nuclear Med.* 67, 805-808 (May 1952).

The urinary elimination of strontium 90-yttrium 90 after inhalation by a human subject was studied. It dropped from 20,300 disintegrations per minute to a low rate in a month and finally to 16 disintegrations per minute, indicating a very small deposition in the bones. It is recommended that in all cases where appreciable quantities of radioactive materials are inhaled, the individual concerned be immediately referred to a physician for a thorough irrigation of the nasal passages. In addition, 24-hour urine samples should be taken immediately following the incident and at intervals thereafter and appropriate analyses for activity made whenever facilities and methods are available.

-- Cond. from Authors' Summary

- 1016 Current Concepts of Therapy of the Radiation Syndrome. J. W. Howland. *J. Missouri State Med. Assn.* 49, 425-429 (May 1952).

A brief discussion as to the nature of the radiation syndrome is given. Specific comment is made on certain signs and symptoms of definite importance in correct therapy. A discussion of the procedures and agents effective at the present time in modification of the radiation syndrome is given. These are analyzed briefly as to probable physiologic effects. An outline of the present day concepts of correct therapy of the radiation syndrome includes the use of rest, antibiotics, careful nursing care and whole-blood transfusion.

-- Author's Summary