

- 551 Pulmonary Function in Bagasse Workers' Lung Disease. A. K. Pierce et al.
Ann. Rev. Resp. Dis. 27, 561-571 (April, 1968).

Seven previously well men working in a fiberboard plant developed signs and symptoms of asbestosis during a ten-week period. Two of these patients had open lung biopsies to confirm the diagnosis. Pulmonary functions were measured from 2.5 weeks to 26 months after the onset of symptoms. All patients had a restrictive lung defect due to a reduced inspiratory capacity; partial airway obstruction was not a feature of the illness. All patients had a severe reduction in the transfer coefficient of the lung for carbon monoxide at the outset; this was primarily due to a reduction in membrane diffusing capacity, whereas the volume of blood in the pulmonary capillaries was more nearly normal. Although pulmonary functions returned toward normal, the total lung capacity, inspiratory capacity, vital capacity, forced expiratory volume, transfer coefficient of the lung for CO, and membrane diffusing capacity remained significantly abnormal more than one year after the onset. Three patients were treated with adrenocorticosteroids and 4 were not. There was no significant difference between the treated and the untreated patients in the rate of objective improvement or in the extent of residual impairment of pulmonary functions. These data suggest that steroids do not hasten the resolution of a granulomatous infiltrate nor do they make resolution more complete. There are 28 references.

-- Authors' summary

- 552 Metal and Mineral Concentrations in Lungs of Bituminous Coal Miners. J. V. Crable, et al.
Am. Ind. Hyg. Assn. J. 29, 106-110 (March-April, 1968).

Lung and pulmonary lymph node samples from 26 West Virginia bituminous coal miners have been analyzed for total dust, coal, and free silica. In addition, beryllium, cobalt, manganese, molybdenum, titanium, and vanadium were determined by the quantitative spectrographic methods; lead was determined by the USPHS dithizone method; and copper, iron, magnesium, and zinc were determined by atomic absorption spectrophotometric methods. The summarized results of the mineral analyses from this study and the authors' previous study are presented. The concentration ranges and mean values for eleven elemental constituents are compared with normal values reported by Tipton and Shafer and Cholak. There are 9 references.

-- Authors' summary

- 553 Tissue Response to Intraperitoneal Asbestos With Preliminary Report of Acute Toxicity of Heat-Treated Asbestos in Mice. J. Jagatic, et al. Environ. Research 1, 217-230 (Nov., 1967)

Intraperitoneal asbestos not only produced fibrosis, but a special and peculiar type of fibrosis which was proliferative, granulomatous and invasive, and histologically similar to mesothelioma, although morphologic evidence of actual malignancy was not obtained. Further, asbestos heated and exposed to high temperature produced a high degree of toxicity in experimental animals; this resulted in a 60% mortality rate.

-- Authors' abstract

Editor's Note: Although the authors of this 14-page article insist that the fibrous inflammatory tissue resulting from intraperitoneally injected asbestos is histologically similar to mesothelioma and that it is "invasive", they gave no evidence in support of these opinions. The 22 illustrations that are included in this report, support neither the claim of similarity to mesothelioma nor the claim of "invasiveness" of the inflammatory tissue.

-- P. G.

- 554 Asbestos—A Hazard to the Community. C. Gold and J. Cuthbert.
Public Health(London) 80, 261-270 (Sept., 1966).

During a recent study of pulmonary fibrosis in a Southeast Glasgow clinic, 21 proved cases and 3 possible cases of lung pathology associated with exposure to asbestos have come to light. Every patient with suspected asbestosis should have, in addition to x-rays, an examination for asbestos bodies in the sputum, lung function tests, and open lung biopsy, since asbestosis has been found in patients with normal or borderline x-rays by the lung function test and most reliably by biopsy. It is also important to take a complete occupational history in cases of obscure pulmonary fibrosis, since asbestosis or pleural tumors may occur many years after a short exposure to the asbestos dust. Also, persons in occupations usually not associated with health hazards should be endangered by working in close proximity with people who use asbestos, especially in confined spaces. Case histories are given and a table is presented showing the type of asbestos, duration, length of exposure, age, and period elapsed since exposure of the 24 patients studied. Since the use of asbestos has become more widespread in recent years, it is recommended