

the light microscope. Incidentally, it seemed that a particle with sharp angles, such as a quartz particle, could easily pierce the layer. It was limited on both the air-space side and the connective tissue side by an osmium-staining cell membrane; a basal membrane was not found. The partition between the blood and the air space consisted of seven layers. In places where the capillaries were not in immediate apposition to the alveolar wall the cellular tissue space was filled with connective tissue fibrils, lattice threads, elastic fibers, and connective tissue cells. Various cells, detached from the alveolar walls, and septal cells were found, but a definite decision could not be reached on their origin. -- Cond. from Bull. Hyg.

- 757 Silicosis. 11. Effect of Sex Hormones on the Amount of Silicon Excreted into Urine. M. Anme. Nagasaki Igakkai Zasshi 31, 381-385 (1956).

Urinary excretion of silicon before and after castration was investigated. In the case of male rabbits silicon increased after castration while in the case of females it decreased. Silicon returned to the normal level after the administration of male hormone or follicular hormone. Corpus luteum hormone showed no effect. -- Chem. Absts.

- 758 Silicosis. 12. Influence of Thyroid Hormone on the Amount of Silicon Excreted in the Urine of Rabbits. R. Kakita. Nagasaki Igakkai Zasshi 31, 438-445 (1956).

Thyroidectomy increased the urinary excretion of silicon by 2 to 3 times, and silicon returned to normal level after the administration of thyroid hormone. Injection of methylthiouracil to normal rabbits increased silicon slightly. Diiodotyrosine and anterior hypophyseal hormone showed no effect. -- Chem. Absts.

- 759 The Neutralization of Silica Toxicity in Vitro. J. Marks. Brit. J. Ind. Med. 14, 81-84 (Apr. 1957).

Phagocytic cells were protected in vitro against the toxic effect of silica dust by compound 48/80, a histamine-releasing agent formed from p-methoxy-phenylethyl-methylamine. The health of the cells was studied by direct microscopy and by measurement of their glucose consumption and dehydrogenase activity. The mode of action of compound 48/80 is not known but may depend on a reduction in silica solubility. A slight protective action was also exhibited by certain alkylmono-amines and polymyxin B. -- Author's summary

- 760 Pulmonary Fibrosis and Giant-Cell Reaction with Altered Elastic Tissue. Endogenous "Pneumoconiosis". R. L. Walford and L. Kaplan. Arch. Pathol. 63, 75-90 (Jan. 1957).

The clinicopathologic findings in 12 autopsied cases of a peculiar pulmonary elastica disease are presented and discussed. It is concluded that injured pulmonary elastic tissue may act as a foreign body or sequestrum and produce a progressive "pneumoconiosis". -- Cond. from authors' summary

- 761 Asbestosis with Pleural Calcification among Insulation Workers. J. Frest, J. Georg, and P. F. Moller. Danish Med. Bull. 3, 202-204 (Nov. 1956).

In Denmark only a few persons manipulate insulation products including asbestos, kieselguhr, magnesia, glass wool, and rock wool. The first two have been regarded as fibrogenic to the lungs when their dust is inhaled. In order to ascertain any occupational risk in the work 31 workers with more than 20 years' exposure, of 52 years average age, were carefully examined clinically and by x-ray. Abnormalities were found in the surprising number of 22. A total of nine exhibited fine mottling indicative of pulmonary asbestosis. In 19 patients pleural changes were seen, which were due to adhesions and extensive thickening with calcification. The abnormalities in the pleura were so widespread in some instances as to obliterate other pathological changes. The calcification is unusual and may be ascribed to combined exposure to calcium and magnesium in the presence of fibrogenic asbestos dust. Sample analyses of the kieselguhr in use did not reveal the presence of alpha-quartz. The finding of pronounced bilateral pleural changes in the present series definitely points to an occupational origin. -- Cond. from Bull. Hyg.