

- 243 Cyanosis and Dyspnea in Silicosis. F. Tronchetti and A. Torsoli.
Presse med. 63, 1390-1392 (Oct. 15, 1955). French.

Examination of 160 patients with silicosis showed that those who had dyspnea on exertion also had evident, constant signs of bronchitis. In some cases the illness is manifested by this bronchitis alone; bronchoscopy and bronchography reveal spasm of bronchi and bronchioles. The authors believe that the bronchospastic tendency is the most important feature in the dyspnea of silicosis. Considering cyanosis, it has been shown by angio-pneumography that among silicotic patients the exclusion of large capillary beds is very frequent in those with severer cyanosis. The capillary exclusion is accompanied by decrease in pulmonary circulation time. It seems that the opening of arteriovenous shunts accounts, at least in part, for the cyanosis of silicosis. -- J. Am. Med. Assn.

- 244 Silicosis and Coronary Sclerosis. F. Boemke, M. Piroth, and F. J. Schulte-Stracke.
Beitr. Silikose-Forsch. No. 33, 1-29 (1955). German.

The relationship between silicosis and its effects on the heart and circulation are discussed. The reports of a large number of autopsies were examined, analyzed, and summarized. It was established that a connection exists between silicosis and coronary sclerosis; this does not suggest, however, that in every case of silicosis the development of coronary sclerosis, or unfavorable influence on existing sclerosis, is to be expected with certainty. Chronic diseases of the lung, including silicosis, is one of the exogenous factors in the formation and extension of coronary sclerosis; in so far as they react on the coronary system through injury to the pulmonary circulation. It was not possible, from the results of the investigation, to indicate which disease is the more important cause of death when both are present. -- Cond. from Bull. Hyg.

- 245 Some Problems of Pathogenesis of Pneumoconiosis. M. Timar.
Gigiena i Sanit. No. 7, 25-33 (1955). Russian.

A brief review is given of existing material on pneumoconiosis caused by dust inhalation. It is shown that silica determination in blood and urine is not a satisfactory diagnostic tool since patients with advanced stages of the disease do not show super-normal silica levels. Dust (cement, quartz, silicate) introduced into animals via the lungs or digestive tract results in increased silica levels in the body fluids usually not less than 1-2 days after the administration of the soluble varieties (cement), while the less soluble varieties produce an irregular pattern which is not significantly different from control variations. -- Chem. Absts.

- 246 Investigations into the Size of Dust Particles Deposited in Different Parts of the Lungs when Breathing Dusty Air. A. Policard and A. Collet.
Arch. maladies profess. 16, 239-242 (1955). French.

Most of the information on the distribution of inhaled dust particles depends upon observations made on pneumoconiotic lungs. The investigation described is based on observations on eight miners who died suddenly at work and were not pneumoconiotic. Only coal particles could be noted with certainty. Most of the particles found in the bronchi, bronchioles, alveoli, and pleurae were smaller than 2.8 microns. Similar small particles were found in the cervical glands. The observations seemed to indicate that 95% of the particles in the alveoli are less than 2 microns; particles of 2 to 4 microns form about 5%. The rest are negligible. These results confirm for healthy lungs the estimates made from pneumoconiotic lungs. Nevertheless, particles as large as 10 microns are found in diseased lungs; how they get there is a mystery. -- Cond. from Bull. Hyg.

- 247 The Pathophysiology of Respiration in Silicosis and the Assessment of Capacity for Work. P. H. Rossier, A. Buhlmann, and P. Luchsinger.
Deut. med. Wochschr. 80, 608-614 (Apr. 22, 1955). German.

Disturbances of lung function in the early stages of silicosis are mostly concerned with ventilation, and in progressive stages these disturbances are proved to be due to reduction