

Having developed our experimental research, we even could not confirm the hypothesis about the chemical-toxic action of asbestos. During the analysis of the materials given by its supporters it is almost never possible to reveal the correlation between the manifestation of asbestos fibrosis and the SiO_2 content in individual persons.

Extrapulmonary changes in other organs being ascribed to the action of resorbed SiO_2 are completely explained by the migration of the asbestos fibers detected, in particular, in parenchymatous organs.

On intraperitoneal introduction of different types of asbestos (1968) we found its filaments not only in the liver and kidneys, but also in the lungs. Roe and Harington (1967) upon introduction subcutaneously of three forms of asbestos into mice found filaments and inflammatory changes, and also swelling in the pericardium, pleural cavity, myocardium and mesenter. The filaments can penetrate even through the wall of the bowels and reach the pleura (Westlake et al., 1965).

We compared further the solubility of the different forms of asbestos and asbestos-bearing dust, and also serpentine and brucite. Thus, after 15 days of contact of the dust of chrysotile-asbestos with 0.1% of Ringer's solution, the concentration of SiO_2 in solution comprised at most 3.8 mg%, and of anthophyllite - 4.8 mg/m³ (see appendix). This agrees with the results of Clark and Holt (1961), who established the low solubility of chrysotile-asbestos. The corresponding index for asbestos-cement dust turned out to be equal to 7.8 mg%, for tremolite - 7.2 mg%.

As our experiments showed, and also the data of the examination of workers over several years (1959, 1967) the most fibrogenous turned out to be the dust which is least soluble