disorganization of the intermediate substance, development of atypical collagen and differentiation of fibroblasts, i.e., processes lying at the principle of the growth. Furthermore, in the cells surrounded by growing fibrous tissue, in connection with deterioration in the conditions for existence, these can be a selection and accumulation of more stable cell versions forming the initial tumoral rudiment (Warburg, 1956).

The results of electron-microscope investigations (Davis 1963, 1968) make it possible to think about the damage by filaments of mitochondrie and the endoplasmic reticulum; it is possible that intact cells change and acquire a capability for atypical multiplication.

It is possible also to think that chrysotile-asbestos, interacting with the protein of a microphage, adsorbs and joins those proteins which play a significant role in the regulation of growth. It is possible that as an answer antibodies which destroy the corresponding cells are formed. As a result cells lacking growth-regulating proteins are accumulated (G. Green). In the experiments carried out in conjunction with A. P. Dorinovskoy (1965) we focused attention on the fact that in the cultures of tissues of the pulmonary embryo which was subjected to the action of asbestos dust, the number of shared cells (78%) was reliably higher than in controls (46%). The impression was created that asbestos increases the activity of mitosis. When the phase coefficient was calculated, we established that the relationship of the number of cells which are in the previous phases of mitosis (prophase and mitophase) to the number of cells in its later phases (anaphase and telophase) in the culture with asbestos turned out to be equal to 7.1, while in the control - 2.8. Impression is created that under the effect of asbestos the division of part of the cells is detained at the previous phase of mitosis. Should

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