

It is especially interesting that induction of cancer is increased with supplementary administration of stilbestrol. It is necessary to recognize that we still do not know the basic reason for the malignant action of asbestos. At the same time, based on the well-known physicochemical features of asbestos, we shall put forth a number of hypotheses which deserve, as it seems to us, a check.

Many authors ascribe the carcinogenic action to chronic stimulation of bronchial tissue by rigid fibers. However, it is known that only a small percentage of traumas is created by stimulus to malignant growth, relatively more solid powders of fiberglass or abrasants do not possess such carcinogenic properties.

Scar itself can hardly be the basic reason for malignancy; indeed with silicosis, where the fibrosis is more considerable, a considerable increase in the frequency of complications of cancer of the lungs is not observed. At the same time, as observed by us, the chronic pneumonia and the metaplasia of bronchial epithelium that appear under the effect of asbestos make the elimination of asbestos worse and thereby they indirectly lengthen its effect.

During the introduction of polymers, around them there occurs a formation of a connective-tissue capsule, within which young fibroblasts and a thickened layer of collagen develop (Shabad, of L. N., 1967). The constant presence of metachromatic polysaccharides indicates the prolonged and constant process of forming of immature collagen. On the other hand, the proliferation of fibroblasts within the capsule leads to the appearance of increasingly less differentiated atypical cell.

In accordance with the hypothesis of Prof. L. M. Shabad, 1967, these multiplying and infiltrated (through the capsule) fibroblasts precede sarcoma. It is possible also that during the prolonged effect of asbestos, which is an inorganic polymer, there is a