

interpretation was complicated by the coexistence of a granulation tissue containing giant cells resembling those present in lymphogranulomatosis. The following histological types were represented in the series studied by Schmorl: 12 squamous cell carcinomas, of which 7 showed keratinization; 6 carcinomas simplex (polymorphous, indifferent epithelial cells); and 3 small, lymphoid celled carcinomas. In six cases, there were tumors of two different histological types present in the same lung. Primary multiplicity of lung cancers was found not infrequently (25 per cent). Schmorl considered primary multiplicity as characteristic for the Schneeberg carcinoma. It may be mentioned that in two cases there were, in addition to primary carcinomas of the lung, hypernephromas of the kidney present. Tuberculosis of the lung, unrelated to the neoplastic process, was found in six cases and pneumoconiosis was noted in 19 cases (moderate degree in 5 cases; marked degree in 14 cases).

Apparently, the neoplasms originate in the mucous membrane of the bronchi. Twelve were located in the left lung, and nine in the right one. Usually, the tumors were of firm consistency and white or yellowish in color. Metastases were always found in the bronchial and cervical lymph nodes. There were secondary deposits in the liver and kidneys in several cases. Bone metastases were found in only 5 out of 31 cases (Hueck). There is no reliable information available as to the occurrence of cerebral metastases, for usually the skull was not opened at autopsy. Whenever multiple primary tumors of different histological structure existed, they had formed separate metastases.

*Medico-Legal and Sanitary Aspects.* The Schneeberg cancer is recognized as a compensable occupational disease in Germany since 1926, following an official investigation conducted by Rostoski, Saupe and Schmorl during 1922 to 1925, a report on which was published in 1926.

The sanitary and technical conditions existing at the mines in Schneeberg have been improved greatly during recent decades. The inhalation of dust and radium emanation was reduced by the introduction of a more efficient ventilation system and the use of wet drilling methods. The growth of fungi was impeded by using lumber soaked in or painted with creosote. Lifts replaced the long ladders in the mine shafts. Working time was reduced considerably. The management of the mines, the physicians of the mining company, as well as private physicians in the surrounding communities, have become fully aware of the occupational hazard connected with the work in these mines. This knowledge must be reflected in a more efficient and thorough medical supervision of the miners. The data presented, however, indicate that an appreciable degree of occupational hazard is still existent and that the precautionary measures taken may be insufficient to provide that amount of protection to the miners which must be expected and insisted upon. In view of the fact that therapeutic procedures are entirely ineffective in combating the disease once it has become established, the only means of controlling