

throughout. No symptoms of displacements. On left side diaphragm sticky (placy

According to the tried diagnostical tactics in case of a free pleura-ribs, for the roentgenological demonstration of pleura visceralis and parietalis, the effusion is maximally punctuated and a pneumothorax induced. This was already recommended by TESCHENDORF and P.C. SCHMIDT. During and afterward no troubles whatsoever. Entire amount of effusion 2 liters, color: yellow, after cooling strangely jellying. Tumor cells in sediment.

Thereafter x-ray of thorax: The right middle and lower lobes have collapsed to the size of a goose egg, the upper lobe to fist size. Pleura costalis hardly pleura pulmonalis over middle and lower lobe clearly thickened without wavy contours or nodulous layers. The positive x-ray diagnosis of a pleura-tumor is not possible.

On the x-ray the lung areas now show an increased net-like structure and small spot-shadows in both middle and lower lobes. The latter was already noticed by the transferring hospital and after exclusion of a specific etiology- raises suspicion of a dust-lung illness. No evidence of silicosis, but the occupational anamnesis is pointing to asbestosis.

From 1920 to 1935 the patient had worked on insulating jobs with asbestos (on pipelines and valve-groups) at a Navy dock-yard; later, until 1942, he was supervising the work. As a supervisor he also spent daily approx. 1 1/2 hours in rooms full of asbestos dust.

Consequently, asbestosis corpuscles were found in the scant, matutinal and remarkably tough and glassy sputum.

For further diagnostical clarification I now performed the thoracoscopy of the right thorax. Thereby the right diaphragm was found porcelain-white and shiny, doubtlessly callously thickened. In the frontal diaphragm-rib-corner (angle), near the mediastinum, a tumor-knot of about plum-size and next to it another about the size of a pea, shaped irregularly, yet smooth on the surface, were visible. From this spot several excisions were made. The pleura appears to be thickened over the ribs extending throughout the thorax, and a bit more injected, and shows small nodulous (knotty) condensations (thickenings) which, in places, have a whitish shimmer. The pleura visceralis is moderately thickened over middle and lower lobe; on it are fine, warty, fairly soft elevations. There were also excisions made in several places of the pleura visceralis. Smooth healing of wound.

-Histological findings of excision materials (Prof. FRANZ, Hamburg):

- a) Test excision from pleura parietalis:
Fettbindegewebestueck (piece of fat-tissue ?) with infiltration by big tumorcells in loosened formations. At the edge small-celled, inflammable infiltrations. Next to it coagulated masses with the same tumor-cells; Malignant blastema (?). (blastomere ?)
- b) Test excision from pleura visceralis: Raps of tissue from tumor-cells among them asbestos corpuscles:

a + b: Malignant blastema and asbestos corpuscles. The look of the cells of the malignant blastema very much suggests pleura-endothelioma.

Our method of diagnostical process not only gave the x-ray therapist a sure explanation with regard to kind, expansion and way of growing of the tumor for his x-ray plan but also led to the proving of asbestos corpuscles in the tumor tissue.

NORDMANN's investigations (examinations) with dissections, and experiments with