

examination at this time showed no sign of cardiac or pulmonary disease and the larynx did not seem to be abnormally fixed. A fluoroscopic examination confirmed the physical examination and though the mass was pulsating, other signs excluded the probability of an aneurysm. The diagnosis was that of mediastinal pericarditis or, possibly, a neoplasm of the mediastinum.

The patient returned to his home for several months, and, while under medical supervision, preserved comparatively good health. On his return in October, however, he presented marked signs of progressive development of the condition with signs of intra-thoracic pressure. There was œdema of the face, right hand and also of the lower thorax, the left arm, the scrotum and the feet. There was slight pleural effusion on the right side and the liver could be felt two inches below the costal margin. By this time, too, a much wider area of thoracic dullness was manifested and the shadow seen by fluoroscopic examination was much more extensive. The neoplasm, for evidently this was the obvious condition, had extended upwards to the right and to the left, as well as downwards, as the accompanying skiagraph will indicate. The movement of the diaphragm could not, at the time, be discerned, probably owing to the presence of the fluid in the chest. There was probable thrombosis of the subclavian vein in the right side. In spite of the extent of the growth there was no involvement of the sympathetic recurrent laryngeal nerve or trachea, the œsophagus, too, was free, as is often the case, being better protected by its position.

Dr. Birkett's examination of the larynx revealed some thickening of the cords but no paralysis. The course of the disease was progressively downwards, but it is noteworthy that up to the time of his death the pulse remained persistently regular in volume and rhythm. His death was sudden, while moving from his bed to a chair. The autopsy revealed a mediastinal sarcoma arising not from the glands, but from the loose connective tissue and involved the heart, pericardium, pleura, lungs, diaphragm and extended by contiguity to the liver and there was evidence of visceral metastasis by blood stream. Note the extensive invasion of the valves, of the auricular and ventricular septa, of the muscles of both ventricles, as well as the external surface.

Much interest centres about that region containing the bundle of His. These bundles, which are presumed to regulate the rhythm of the heart, would seem to have almost entirely been replaced by new growth and certainly to have been interrupted in their course. One would, therefore, have anticipated at all events, disturbance in rhythm and some irregularity. The work of Fahr, Gibson and others, demon-