

absent. A persistent, short, hacking cough, with scant or no expectoration, is very frequently the very first sign, and often occurs long before physical examination of the chest shows any pulmonary lesion. Sometimes, however, it is possible, by very careful auscultation, to hear over one very small area, usually in the back near the spine, in the region corresponding to the hilus of the lung, that peculiar bronchial swish which the French call "cornage," and which points with certainty to an obstruction of a larger bronchus. When this is found in an elderly person in apparently good health, or at any rate without any signs or history of chronic pulmonary disease, it is most suggestive, and should at once arouse suspicion of a developing bronchial carcinoma. As in all other forms of malignant disease, loss of weight and strength are very unreliable and inconstant symptoms. In many cases of pulmonary tumor, they occur at a very early period of the disease, may, in fact, be the very first sign; in others, cachexia does not appear until very late. I have seen several cases in which there was no appreciable emaciation or impairment of strength up to the fatal termination.

The sputum is of the greatest interest and importance. The much discussed prune-juice or black currant jelly sputum is still mentioned in most text-books as pathognomic of malignant disease of the lung. This, however, is not in accordance with the facts. It is far from being a constant sign, and a very great number of cases have been reported where this type of sputum was never seen; it appears, too, that its occurrence is by no means confined to lung tumors. Where other symptoms point towards cancer of the lung, the prune juice expectoration may be accepted as a further corroboration of the diagnosis; its absence has no diagnostic significance. There are cases on record in which from first to last there has been no expectoration whatever; in many others the sputum has been merely mucoid, and not at all characteristic of disease. Where there are bronchiectatic dilatations, the sputum may be muco-purulent, purulent and fetid; again, it may exhibit all the well-known characteristics due to a gangrene of the lung. In the great majority of cases, the sputum at one time or another is bloody; sometimes there is so little of this that only close inquiry will elicit the fact that it has ever been present. Oftentimes the bloody expectoration is very constant during the entire course of the disease: it may be only an occasional pinkish stain, but more often a dark red or blackish tenacious secretion. More or less profuse hemorrhages may occur, and they are not so rare as some authors, Hampeln, for instance, would have us believe. Sometimes, as is so frequently observed in tuberculosis,