

In the circulatory system the only sign which has any value in the diagnosis of pulmonary tuberculosis is accentuation of the second sound of the heart in the area of the pulmonary semilunar valves. This sign has a real value only when taken in connection with abnormal pulmonary signs indicating tuberculosis and in the absence of any concomitant pulmonary or cardiac lesion that is capable of producing such an alteration.

### (2) *Examination of the sputa.*

The data obtained by physical examination, however conclusive apparently, should invariably be supplemented by examination of the sputa, if there be any, at the earliest possible opportunity. Patients often say that "the expectoration does not amount to anything, only a little mucus." It may not amount to much in quantity, but bacteriologically it may amount to a great deal. The most innocent-looking mucus, or even a thin fluid which appears to be nothing more than saliva, may fairly teem with tubercle bacilli. The sputum in the earliest period of tuberculous infection of the lungs is usually a homogenous, viscid, greyish, or slightly greenish-grey, mucus, which may or may not contain blood. Even in such mucoid material one may usually find more opaque slightly muco-purulent particles or streaks. These should be picked out and examined with particular care. Repeated and frequent examinations are necessary if one wishes to be reasonably certain that tubercle bacilli are not present, and in doubtful cases centrifugation of the sputum will show bacilli when none have been found by the ordinary methods of examination. The search for elastic tissue fibres does not really belong to the diagnosis of incipient pulmonary tuberculosis. When these are found, softening, however slight, must have taken place. It has even been claimed that the presence of tubercle bacilli in the sputa also necessarily implies breaking down of the lung structure.

### (3) *The Tuberculin Test.*

By careful and thorough examination of the lungs and repeated microscopic examination of the sputum, it is usually possible to detect pulmonary tuberculosis at a comparatively early stage, sufficiently early, indeed, to ensure to the majority of the patients a return to health after a more or less prolonged interval, provided that as soon as the diagnosis is made they be placed under the most favourable conditions for recovery.

We have, however, in tuberculin a means of diagnosis which enables the physician not only to make an earlier diagnosis of pulmonary tuberculosis, but to affirm the tuberculous nature of ailments which formerly were not believed to be tuberculous, or, at most, were considered to be the antecedents of a possible or probable tuberculous infection. With