

greatly as to intensity. Sometimes the little one appears to be in the extremest distress, and there may be such tenderness of the affected part that the least pressure causes flinching. In other cases the pain is moderate and not lasting. Though I cannot give you the reason, I may mention the fact that the pain may remain limited to one small spot, though all the pleura of that side may have become inflamed.

I may as well tell you here that you will sometimes fall in with cases of pleurisy that are latent as to pain and other prominent symptoms. A child that had not been known to be seriously ill is brought to you for an opinion as to the cause of its failing health. You examine it and find one side of the thorax full of fluid. Insidious pleurisy is rather frequent in early life, especially in connection with scarlet fever and some other diseases.

The next symptom that will in most cases engage your notice is the cough. A child in the first days of pleuritis handles its cough with the greatest caution. It is short, dry, and frequent, and the pain that it causes and the efforts to suppress it are often depicted in the features. But the cough is as variable as the pain. In some cases it is well nigh constant; in a few so slight as scarcely to attract notice. But please to notice that the cough *follows* the pain—the latter generally having a lead of half a day or more.

Another point is the fever. Pleuritis, like other affections ending in *itis*, is attended by a rise of temperature. I think it is seldom quite as high as in acute pneumonia. The difference in surface heat between these two divisions may be strikingly evident to the hand. In pneumonitis the integument is often "burning hot;" in pleurisy it feels but little warmer than nature. In pneumonitis also the face is flushed, often crimson; in pleuritis, if there is a little flushing at first, it soon subsides and leaves the countenance pale and often rather sallow. Notice also the decline of temperature in the two diseases. In acute pneumonia it is sudden; at the end of a week or thereabouts the crisis occurs and the temperature falls quickly—in one day—to the normal or even below it. But in pleuritis the decline is always gradual. Often two or three or more weeks pass before it drops to the standard of health. The pulse is, of course, quickened in its pace, and there are the usual attendants of the febrile state.

Occasionally, in the first days, when the fever is at its highest, there is severe headache and active delirium; and if there is also vomiting and constipation you may lean towards a diagnosis of cerebral inflammation. But consider and weigh all the symptoms and carefully examine the chest, and you will seldom go wrong.

Another feature of this disease that claims your attention is the breathing. It is hurried, but less so, as a rule, than in pneumonia. If you observe it carefully you will be struck with its superficial character. The child prefers to breathe frequently rather than deeply, for it has learned that a full

breath excites the cough and causes pain. There is seldom either much dyspnea or lividity. If the child needs more air, it breathes oftener rather than deeper. Sometimes there is a little expansion of the nares and an expiratory moan, but these features are seldom as prominent as in pneumonitis.

Altogether the child will probably seem to be less ill than are children with acute inflammation of the substance of the lung, nor is there at the end of a few days that sharp turn for the better that characterizes the latter disease. The natural result of an inflammation of the pleura is, as you well know, an increase in its functional activity; hence an exudation of fibrinous lymph or of serum, or both. Layers of fibrin are deposited on the pleural surfaces while detached shreds and floculi of it float in the fluid that is accumulating within the cavity. In most instances this fluid is a clear serum; but here is a point that I would emphasize: In children this fluid has a remarkable tendency to become purulent; sometimes, indeed, it has this character from the very first. This is empyema.

The amount of effusion is variable. There may be but two or three ounces—not enough to hamper the lung in its movements; or there may be sufficient to fill the cavity full and over-full, so that the lung, retiring before it, is crowded into a corner at the upper and inner part of the chest—an airless, bloodless, leathery lump.

I hardly need to tell you that, as a result of excessive effusion, the diaphragm may be pressed downward, the heart crowded to one side, the intercostal spaces rounded outwards, and the side considerably increased in its measurement. The increase in size, however, may be difficult to estimate, because the other side may be enlarged as much from the increased volume of the sound lung that now has double work to do.

I have gone somewhat minutely into the general symptoms because the physical signs on which in the pleurisies of adults we can plant ourselves with so much assurance are often, in children, unreliable and misleading. Especially is this so at first. Auscultation is unsatisfactory, because the child breathes as superficially as possible, and the friction sound is seldom caught in infants and young children.

After some days, when considerable effusion has occurred, a diagnosis is not difficult. The flat, toneless thud, and the sense of great resistance on percussion, are of themselves almost conclusive of a fluid accumulation. Above the level of the liquid the sound will be clear and tympanitic. In some instances the diagnosis may be happily confirmed by observing that the upper line of dullness varies with changes in the posture of the child. But often the fluid is confined by fibrinous partitions, or the pleural sac is full, and then this test is not available.

In the adult, when the effusion is large, all respiratory sounds may be absent, and the results of auscultation are only negative; but in children there is seldom so much fluid between the lung