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THE DIAGNOSIS OF ACUTE PNEUMONIA.

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THE hardest part of the diagnosis of acute pneumonia is in differentiating it early from the acute specific fevers, when physical signs are delayed, when there are cerebral symptoms, and particularly when the disease is met with in children.

The accompanying cases exemplify almost all the conditions of doubt. All the patients were young; in all three, physical signs referring to the lung were at first entirely absent and were late in appearing; in all, delirium was noticeable. The fever was sharply-marked in its beginning, high in character, and sustained for about a week. One fact, namely the pungent heat of the skin, certainly suggested one of two diseases, scarlatina or pneumonia. And for the former there was this much also to be said, that it was not unknown in the neighbourhood. Again, all three patients complained at first of sore throat, and in all the fauces were abnormally red and slightly swollen. The tongue, covered with creamy fur save at the edges and tip where the papillæ were bright-red, which each patient presented, was another argument for scarlatina. The pulse-respiration ratio was of little value as a guide, for the breathing—easy and unembarrassed till the third or fourth day—was not more quickened at first than the mere rise of temperature would lead one to expect. All these cases were seen in the first twenty-four hours of illness, so that the idea of scarlatina could not be definitely rejected till after a day at least. And as there was no epidemic to speak of, practically the chance of their being examples of

scarlatina *sine exanthemate* was non-existent. There was no pain or swelling of or about the joints, as sometimes happens in the early days of scarlatina when the rash is faint or delayed. The same fact held good as against rheumatic fever, and there was no perspiration; as a rule, too, the temperature in it does not commence with so rapid a rise or keep so high. Measles was possible for the first few days, though none of the patients developed any rash at all, and one of them had had an attack a year or two before. In the two younger children, *Cases* II and III, there seemed a fair prospect that their trouble might turn out to be only one of the febriculæ—the sharp rises of temperature without apparent cause—to which children are so liable.

Later on, after the first two or three days, meningitis had to be considered. Headache, delirium, and vomiting were symptoms common to the three patients, and *Case* II had a fit of general convulsions at the beginning of his illness. But none had otorrhœa, tubercle showed no trace of its presence, and there was nothing traumatic about the history of the attack. So that the only kind left to exclude was epidemic cerebro-spinal meningitis, and there was none of that around. Also the results of treatment, the quieter nights, as well as the decided symptoms of pneumonia, soon settled this question in the negative. Quickened respiration, cough, pain in the affected side, a blush on the cheek on the same side, and herpes labialis were the earliest of those symptoms. An early sign of great importance is the increased resistance to percussion over the area of consolidating lung, before any real dulness can be said to exist. This resistance seems to accompany the fine crepitations, and may with them be regarded as one of the earliest physical signs of pneumonia.

In these cases, then, the constitutional condition was severely affected for some days, while there was no local condition at all —unless it were deep-seated inflammation of the lung—to account for the cause of the fever. And the constitutional state did not run *pari passu* at all with that of the lung, when the latter was affected. All these facts tend to show, as it seems, the likeness of acute pneumonia to the acute specific fevers, and that probably the lung-trouble is only the local manifestation of the general disease, just as the intestinal lesions are of enteric

fever, or as the false membrane is of diphtheria. That pneumonia should be so like the acute fevers in its commencement is thus hardly a matter of surprise.

Case I.—Henry E.——, aged 12.

Feb. 18.—Evening before, vomiting, very feverish, "wandering." Headache. *Present Condition:*—Tongue white-furred, clean edges; fauces inflamed. No rash. Lungs and heart normal. Skin very hot. Temp. 103·6°. Resp. 30. Pulse 110. Constipated.

Feb. 19.—Physical condition much the same. Tongue cleaner. Ordered paraldehyde ℥ss twice at night, on account of delirium. Temp. 104·2°. Resp. 36. Pulse 120. Urine acid; sp. gr. 1·025; urates; no albumen.

Feb. 20.—Good results from paraldehyde. No rash or pain. Temp. 103·8°. Resp. 40. Pulse 122.

Feb. 21.—Slight cough. Temp. 104·6°. Resp. 38. Pulse 126.

Feb. 22.—More cough, pain in right side of chest, tender over right base, increased resistance there, and very fine crepitations. Temp. 102·8°. Resp. 42. Pulse 130.

Feb. 23.—Percussion dull over right base, half-way up. Bronchial breathing; vocal vibrations increased. Great pain. Herpes on lips. Flush on right cheek. Sleeps well with the paraldehyde. Temp. 103·2°. Resp. 44. Pulse 124. Ordered Syrupi Scillæ ♏ xv, Tinct. Nucis Vomicae ♏ iv, in ℥ss of Aq. Chloro. every four hours.

Feb. 24.—Rusty sputa. Physical signs similar. Sub-tympanitic resonance beneath right clavicle. Urine normal. Pain relieved by poulticing. Temp. 101·4°. Resp. 34. Pulse 102.

On the 25th the temperature was normal, and thenceforward kept so; the lad made a very good and speedy recovery. He had altogether ℥j of paraldehyde (16 doses) during his illness.

Case II.—Charles C.——, aged 4½.

Mar. 10.—Feverish, vomiting, headache all night previous. Tongue strawberry fur. Skin pungently hot and dry. Sore throat. No cough. Lungs' and heart's sounds normal. No rash. A fit of general convulsions about 5 p.m. Temp. 104·2°. Resp. 30. Pulse 120. Two grains of calomel given.

Mar. 11.—No coryza. Throat much better. Restless night. Still vomited a little. No physical signs. Temp. 103·8°. Resp. 34. Pulse 126.

Mar. 12.—Slight cough; delirious at night, drowsy by day. No rash. Tongue cleaner. Chest poulticed. Temp. 102·8°. Resp. 32. Pulse 122.

Mar. 13.—Herpes on lips. Cough worse. Pain on right side. Fine crepitations at right base. Blush on right cheek. Temp. 103·2°. Resp. 40. Pulse 130.

Mar. 14.—Bronchial breathing and dulness at right base and half-way up. Fine crepitations higher up. Greenish-yellow sputa coughed up. Urine acid; 1·028; urates.

Mar. 15.—Marked dulness over lower half right lung. Coarse crepitations. Heightened tone of resonance under right clavicle. Rusty sputa. Temp. 102°. Resp. 30. Pulse 116.

On the 19th his temperature was subnormal, and he made an uninterrupted recovery thenceforward.

Case III.—George H.——, aged 6.

May 3.—Feverish the night before ; vomiting ; vertical headache. Wandering ; no cough. Bowels confined. *Present Condition :*—Tongue strawberry fur. Pungent heat of skin. Slight sore throat. No physical signs. Temp. 104°. Resp. 30. Pulse 120. Ordered paraldehyde ♏ x, *bis nocte.*

May 4.—Better night. No rash. Headache not so acute. No further signs. Very drowsy. Temp. 104·8°. Resp. 34. Pulse 128.

May 5.—Slight cough ; .pain over abdomen. No physical signs in lungs. Tongue cleaner. Temp. 103°. Resp. 38. Pulse 130. Still slight vomiting. Delirium at night. Ordered a mixture of chlorate of potassium and syrup of tolu, a teaspoonful every four hours.

May 6.—Cough dry and hacking, no sputa. Fine crepitations left base behind, and over a small area a sense of increased resistance, slight dyspnœa, *alæ nasi* dilating. Face with deeper flush on left side. Temp. 102·6°. Resp. 44. Pulse 124.

May 7.—Slight dulness at left base. Coarse crepitations, bronchial breathing, pectoriloquy at base of scapula. Skin moist. Tongue clean and moist. Temp. 101·2°. Resp. 40. Pulse 116.

May 8.—Temp. 98·6°. Resp. 44. Pulse 84.

May 9.—Bronchial breathing and dulness left apex. Coarse crepitations lower down.

Boy rapidly recovered.