Clinical Notes on Some Common Ailments.

PNEUMONIA.

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In the preceding papers we have seen how the branches of the windpipe may become inflamed, and the disease which we know as bronchitis result. Frequently, however, the mischief extends further down into the air cells themselves; we then have the condition known as pneumonia or inflammation of the lungs.

As a matter of fact, this may arise in two rather different ways, though the resulting disease is, from the nursing point of view, pretty much the same; so, after a brief description of the origin of the two types, the symptoms and treatment of the two will be taken together.

Obviously, one way in which pneumonia may arise is by direct extension from the bronchial tubes in a patient who is already suffering from bronchitis; this type is therefore known as broncho-pneumonia, or catarrhal pneumonia, and it is usually due to germs known as streptococci. In this case the disease has no definite distribution—that is to say, any one part of the lung or group of air cells is as liable to be attacked as any other, and in practice the inflammation is usually present in both lungs from the first, though it may be, and usually is, more marked in one lung than the other. It begins in patches or islets separated from one another by areas of lung which are healthy, except for the previously existing bronchitis. Inasmuch as one patch is apt to become involved before the first one clears up, the disease does not finish in the whole of the lung at the same time, and consequently its signs as we see them at the bedside may run on for a considerable time, like a series of relapses, and in practice it does not do to prophecy about the duration of an attack of pneumonia of this type. It occurs most commonly in children, though adults are sometimes affected in the course of the bronchitis which is associated with influenza.

In the other type, however, the air cells are affected directly, and, though the infecting organisms (which are most commonly those which we call pneumococci) pass down the bronchi, they do so without causing inflammation of the tubes to any great extent; possibly, moreover, the germs may sometimes find their way into the air cells through the blood vessels, if they are present in the blood to begin with. The distribution of this kind of pneumonia is quite different, inasmuch as all the cells in one lobe of a lung are affected at once; consequently, unless the opposite lung is attacked subsequently, the disease runs a definite course, and the symptoms terminate rather suddenly, usually on the fifth or seventh day of disease. This type is known as lobar pneumonia, and is most common in previously healthy adults, though it sometimes occurs—usually in a mild form—in children also.

Whatever the origin of the type of disease may be, the results for our purpose are the same. The air cells become filled with a tough mass of cells which is quite impervious to air, so that the part of the lung which is affected is rendered useless for breathing purposes, and the patient has to manage with the healthy remainder; consequently the difficulty in breathing is much greater than when bronchitis only is present, and the air cells are obstructed with fluid through which some air at all events can pass.

So much for the mechanism of the disease; let us now see what happens to the patient who has been attacked by it.

Obviously he will be seriously ill and unable to get about, and as he has only a portion of his lungs to breathe with, he will have to take in his supplies of air more frequently than usual if his red corpuscles are to have their proper supply of oxygen. In practice this increased frequency of breathing is most marked, so that the respirations may be as many as 60 or 80 per minute. Then, too, the extraordinary muscles of respiration are brought into play, and we see the sternomastoids in the neck and the intercostals between the ribs working with each inspiration; even the nostrils participate in the effort, and may be seen to contract and dilate as the chest is filled and emptied.

Then there is pain which is felt more acutely when a deep breath is taken. Usually this is referred to the side of the chest over the affected lung, but is not infrequently felt in the abdomen, especially at the onset of the disease, so that it is not uncommon for a diagnosis of appendicitis to be made at this stage of a right-sided pneumonia.

The patient is also feverish, the temperature being usually very high (about 103 degrees or 104 degrees), and remaining so in lobar pneumonia, while in the bronchial form of inflammation it generally rises and falls at frequent intervals, being usually highest at night. Temperatures of 105 degrees, or even 106 degrees, are not uncommon in lobar pneumonia, especially in children, and it is important to remember that the height of the fever bears no necessary relation to the severity of the disease; in fact, the worst attacks are often associated with a temperature that is but little

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