THE IMPORTANCE OF PNEUMONIA AS A CAUSE OF DEATH.*

BY

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PNEUMONIA has been recognized as a distinct disorder as long as medicine has been an art. Hippocrates and all his successors treated of "peripneumony," recognizing the disease at its onset by only one of its symptoms—the pleural pain—which so often accompanies its onset. The viscid and blood-stained sputum of pneumonia was also well known to them. Hippocrates also distinguished between true pneumonia, which he called "peripneumonia vera," and "peripneumonia notha," a false or, as it became to be known later, a bastard peripneumonia, which appears generally to have been bronchitis or perhaps empyema. Laënnec elicited the physical signs of the disease, Rokitan-ky described its gross morbid anatomy, and, as a subsequent speaker will, no doubt, remind you, Weichselbaum discovered the micro-organism which we now regard as the immediate cause of this morbid condition.

Pneumonia, far from diminishing in frequency, has now attained the bad pre-eminence of actually causing in this country more deaths in a year than any other disease (irregular groupings by the Registrar-General excepted), and also of having caused in 1907 more than double the number of deaths it did in 1881.

I fancy that these facts will come as something of a surprise to many; I have therefore prepared a chart showing the number of deaths from pneumonia during the last twenty-eight years, and, for comparison, show on the same chart the deaths of what I should have considered before writing this paper to be the most fatal disease of the respiratory system—namely, pulmonary phthisis.

From an inspection of the chart it will be observed that the continuous line showing deaths from pneumonia is in 1881 away at the bottom, and the broken one which stands for phthisis away at the top, and that the respective deaths in the year were 23,700 and 47,500, phthisis killing twice as many as pneumonia. For the first eight years there is a slight rise in deaths from pneumonia, and a fairly steady fall in those from phthisis. About the year 1890–1 there is an increase in both, but that in pneumonia very much exceeds that in phthisis. In 1894 we find a rapid fall in pneumonia and a steady fall in phthisis. Phthisis rises again, but not much, to 1900, while at this time the rise of pneumonia deaths has been so great that the continuous line crosses the broken one. It falls below again in 1901, but since that date has been constantly above it, phthisis having fallen 11,000 below its maximum in 1883.

Of course, the explanation of the considerable rises of the continuous line in 1890 and 1900 to 1902 will have already struck you. The former corresponds with the first serious epidemic of influenza in our times, and the

second with the recrudescence of the same disease. You will notice that the broken line rises in the same years, but I think we should not be wrong in assuming that the increase in phthisis deaths was due in many cases to pneumonic complications.

Now pneumonia, as far as I know, stands alone (or only with cancer) in its steady increase. Other respiratory diseases which might seem to be subject to the same conditions have not followed a similar course; and here I may venture on a digression and join issue with the medical officers of health and the Registrar-General, who continue to lump pneumonia with bronchitis, emphysema, and pleurisy.¹

Dr. Boobhyer of Nottingham, in his latest report, says:

It is still convenient to consider them together as affections of the same organs, having similar seasonal curves . . . and affected in their prevalence and fatality by the concurrence of similar acute specific maladies.

Against this dictum I can set the fact that the death-rate per million from bronchitis was, in 1881, 2.145, and in the influenza year (1890) 1.682, and is now (1908) only 1.092. Pneumonia had bounded up from 910 in 1881 to 1,372 in 1890; in 1907 was 1,380; and, though a slight decline set in in 1908, is still 1,180.

Similarly, the deaths per million living from phthisis were: 1881, 1.825; 1890, 1.682; and 1908, 1.100. I give you these figures because it might be objected that in my chart I gave total deaths and made no allowance for increase of population. It will be clear, however, that though a rise in pneumonia deaths may be discounted by a rise in population, the fall in deaths from phthisis and bronchitis is appreciated by the population increase. The case mortality of pneumonia is quite an unknown factor. The latest textbooks give 14.0 per cent., but it may well be greater; and we certainly

In the chart the number of deaths are indicated in the first column, the years at the heads of columns, and the numbers of deaths in each year underneath.

know it to be greater in men of age 40–50.

Had this disease suddenly appeared among us we should have seen a kind of panic seize the public, and leagues would have been founded and large sums of money contributed to combat it; but because it is an old friend we see it calmly accepted as an inevitable concomitant, as well as a mode of termination, of life. Is it too much to hope that some form of antidote, whether by serum or other means, may be discovered in the near future?

REFERENCE.

¹ See Sir J. W. Moore in *Dublin Journal of Medical Science*, January, 1911.

SOME particulars of the medical side of the manoeuvres of the United States army in Texas are given by Dr. N. S. Jarvis in a paper published in the *New York Medical Record* of May 27th. The army, which consists of 12,000 men, is served by four field hospitals, with four complete ambulance corps. The camp is supplied with water piped from the neighbouring city; carefully disinfected latrines are used, and solid and liquid refuse is cremated; the entire army underwent antityphoid vaccination and vaccination against small-pox; after one month no cases of typhoid had appeared. An expert bacteriologist examined the blood of every case of fever of forty-eight hours' duration, and sanitary instruction is given to officers and men.

*Introduction to a discussion on Pneumonia by the Leicester and Rutland Division of the British Medical Association.