

Europe. Of these, 2,751 cases were treated with bleeding, and 8,876 without it. Among the latter, however, 452 cases had exceptional modes of medication in the use of chloroform, lead, copper, or iron. Deducting these, the comparison rests between 2,751 cases treated with, and 8,424 cases without bleeding. The figures, in summary, are these:

With bleeding, either often, a few times, or once, with or without tartar emetic, altogether, 1 death in 11.1 cases.

Without bleeding, under all treatments except with opium—except, also, with chloroform, copper or iron, as before said—1 death in 9.7 cases.

Large and repeated bleedings, alone, 1 death in 11.6.

Bleeding a few times, or moderately, alone, 1 death in 12.3 cases.

Bleeding and tartar emetic, 1 death in 12.56 cases.

Tartar emetic, no bleeding, no opium, 1 death in 11.3 cases.

Opium, without bleeding, 1 death in 3.3 cases.

Tartar emetic and opium, without bleeding, 1 death in 3.8 cases. I would call attention especially to these last figures, for the greatest mortality obtained under any method was that under the opium treatment of pneumonia.

Next, I present a comparison of mortality from pneumonia in the United States Army, at two periods: one before the anti-bloodletting movement had fairly set in, and the other, when it had begun to make a decided impression upon general practice. Between 1840 and 1854 there were, in the United States Army, 1,416 cases of pneumonia, with 127 deaths—1 in 11.15; between 1855 and 1859, 657 cases, with 97 deaths—1 in 6.67: an increase of more than one-third in the proportion of deaths.

The testimony of Dr. George B. Wood, in the first edition of his *Practice*, published in 1847, was decided as to the favorable prognosis of uncomplicated pneumonia, especially in early life. Dr. Lewis P. Gebhard, of Philadelphia, whose practice began near the beginning of this century, and was extensive for many years, told me, near the end of his life, that he had never lost a case of simple pneumonia.

Examining the records of the Pennsylvania Hospital, as a representative institution, with a medical

staff excelled by none in reputation and ability, I have found the results to be as follows: In the three years, 1845, '46, and '47, from pneumonia and pleuro-pneumonia, 1 death in 16 cases—6¼ per cent.; in the years 1865, '66, and '67, 1 in 5½th, or 18½ per cent.; in 1884, '85, and '86, 1 in 5.2, or more than 31 per cent. To make sure the avoidance of the error of confounding cases of acute tuberculosis with pneumonia, in this comparison, I invariably took only those fatal cases in which the diagnosis of pneumonia was entered at the time of the death of the patient. In collating some other statistics of the same hospital, which were cited in the discussion upon my paper in the Philadelphia College of Physicians, I believe this precaution was not taken; and hence a greater mortality was inferred, throughout the time investigated.

Dr. A. L. Loomis, in his article on 'Croupous Pneumonia,' in the *American System of Practical Medicine*, states that the average ratio of deaths from pneumonia to those from all diseases together, in New York, was 15.2 per cent. greater between 1859 and 1877 than between 1840 and 1858:

Other figures are given more fully, with references to their authorities, in my paper. The figures may be altogether summarized thus: first, all prior to, or not later than, 1858.

Skoda estimated the average mortality of pneumonia, about 1841, as 1 death in 8 cases. Balfour, near the same time, reported his observation in a homœopathic hospital under Fleischmann (treatment probably *nil*), of a mortality of 1 death in 6½ cases; Dietl, with diet only, no bleeding nor medication, 1 death in 3.5 cases: in the British army, at home, and in various stations, average of all together, 1 death in 20.66 cases; hospitals in a number of different cities in Europe, from 1822 to 1854, average 1 in 9.54; United States Army, as already said, from 1840 to 1850, 1 in 11.15; Pennsylvania Hospital, as before mentioned, 1845, '46, '47, 1 in 16. Taking all these together, it is safe and fair to estimate the average mortality of pneumonia, during the second quarter of this century, as not more than 1 death in 12 cases, or 8.33 per cent.

Coming now to the recent and present mortality of the same disease, we find it editorially stated in *The Medical News*, of December 11th, 1886, that 'the rate of mortality' of pneumonia 'in the large general hospitals in this country is rarely below, more