TYPHUS FEVER IN DUNDEE.

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THERE were in all forty-one cases of typhus fever notified during the year, the highest number reported in any year since 1893. Of these, however, five were wrongly diagnosed, while one case sent to hospital as typhoid fever turned out to be typhus; and two other cases occurred in hospital, viz., a wardmaid and a nurse who were on duty in the typhus wards. This makes altogether thirty-nine cases of genuine typhus which came under our notice during the year.

In the month of January a seaman was discharged from his ship at Liverpool and came to Dundee. He was ill on arrival, and was seen the following day, when typhus was diagnosed, and he was at once removed to hospital. After this we remained free of the disease till the month of April, when an outbreak occurred in a tenement in Douglas Street. A woman was removed to the Poorhouse Hospital supposed to be suffering from influenza, but on her arrival typhus was diagnosed, and she was at once removed to King's Cross Hospital. On visiting the house I found that her sister had been ill for a fortnight with what was believed to be influenza, while a niece was in the house ill and in bed. There is no doubt that from the first the disease was really typhus fever, but I was unable to trace the origin of the outbreak any further back. Both these cases were removed to hospital, where the woman who had recovered was disinfected, while the house and all its contents were thoroughly disinfected and cleaned. Seventeen cases could be distinctly traced to infection from this house.

The sex and ages of the thirty-nine cases were as follows :

	Males.	Females.	Total.
Under 5 years ...	2	0	2
5 years and under 10 ...	6	5	11
10 " " 15 ...	1	1	2
15 " " 20 ...	0	0	0
20 " " 30 ...	4	5	9
30 " " 40 ...	4	5	9
40 " " 50 ...	1	3	4
50 " " 60 ...	1	1	2
Total 	19	20	39

There were five deaths, giving a case mortality of 12·8 per cent. Of these four were in persons between thirty and forty years of age (three males and one female), and one, a female, aged forty-eight.

The origin of such an outbreak as this is very difficult to explain. With our present knowledge of the ætiology of the infectious diseases, we must dismiss the idea of the disease arising *de novo*, but our ignorance of the organism which gives rise to the disease, and of its life-history, etc., prevents us arriving at any satisfactory conclusion as to the source

of infection in the first instance. What we must believe, however, is that these outbreaks, isolated as they are in point of time, must originate from some infection from previous cases, perhaps mild and undiagnosed, or perhaps diagnosed as something else. We also know that the infection of typhus clings for a long time to clothing which has not been disinfected and cleaned, and I have a suspicion that the pawnshop plays an important rôle in such outbreaks as we have from time to time. Another thing which allows the disease to obtain a footing is the difficulty of diagnosing it. It is found in the first instance amongst the lower classes of society, and these cases are generally seen by some of the younger medical men, who, now that the disease is so rare, have had few opportunities of studying it. The initial symptoms very closely simulate those of a type of influenza lately so prevalent, and as a matter of fact it is generally diagnosed as such. Another point which sometimes gives rise to difficulty is the absence of the rash. The rash is one of the most reliable—probably the most reliable—factors in the diagnosis, and, especially in children, undoubted cases of typhus occur in which the characteristic rash does not appear. A case of this kind came under my notice during the outbreak in question. Two children were ill, and the physician in attendance, suspecting typhus, had the children thoroughly washed several times and carefully examined for the rash, which, however, did not make its appearance. These cases were only cleared up when two adults in the same house contracted the disease, and in them the rash was distinct and characteristic.

Typhus fever is a disease which has a distinct relation to dirt, overcrowding, and want of ventilation, and in this instance the tenement in which it appeared consisted of dwellings with these characteristics. In it there are altogether thirty-three one and eight two roomed houses, mostly badly kept, badly ventilated, and overcrowded. The stairs and lobbies were dirty, and altogether just such a place as favours the spread of typhus once it finds a lodgment. At the same time, the fact that only four of the families living in the tenement were infected, and that in every case only those neighbours and friends who had actually visited the infected houses contracted the disease, illustrates what has been repeatedly pointed out before—that the “striking distance” of the disease is very limited; that the infection is readily dissipated by fresh air, although its infectiousness is very great when one is exposed to it in a concentrated form, as it were, as in badly ventilated houses.—*Annual Report, 1899.*

REVIEW OF RECENT BACTERIOLOGY.

THE PRESENCE OF *BACILLUS TUBERCULOSIS* IN THE NASAL CAVITY OF HEALTHY PEOPLE.—The researches of Cornet and others having demonstrated the occasional presence of *Bacillus tuberculosis* in the dust of rooms which have been occupied by tuberculous patients, Straus¹ was able to carry the matter a step further by proving the presence of the bacillus in the nasal mucus obtained from apparently healthy nurses and other persons who had been brought into more or less close contact with such patients. The presence of actively virulent bacilli in the nasal secretion of 40.9 per cent. of twenty-nine such individuals examined was proved by the results of guinea-pig inoculations. Noble Jones² has examined in like manner the nasal secretion of twenty-nine apparently healthy individuals who had not been brought into contact in any