

more than out of condition for an hour or two, and the most serious of all the forms.

The specific germ associated with it is known as the *Diplococcus intracellularis meningitidis*. It has been found only in two localities, in the exudate in the brain and cord, and in the secretion of the back part of the nose and the throat, and this is a very important matter in connection with the spread of the disease. For instance, Ostermann last year examining twenty-four throats of persons who had not the disease, but who were exposed to it, *i.e.*, who were attending upon patients, or who had been in their neighbourhood, out of these he obtained the organism from seventeen, showing that it is a widely diffused germ, and probably many throats during an epidemic harbour it, as so many of us do the pneumococcus. Indeed, the organism is a near relation to this germ, a sort of cousin perhaps, possibly a half-sister, at any rate a very close relation. The disease has, indeed, many points of resemblance with pneumonia. One remarkable feature has been brought out of late years. We have hitherto regarded cerebro-spinal fever as an epidemic, but we now know that a certain type of meningitis, the posterior basic, is due to the same organism, so that in reality cerebro-spinal fever, while not occurring as an epidemic, does exist in this sporadic variety all over the country.

From recent bacteriological studies, there can be no question that this so-called posterior basic meningitis, described by Gee and Barlow and well known in this city, represents the sporadic form of the disease. It occurs constantly in the community. There are cases in the Children's Hospital of this city every year: indeed, there are cases there now; and it also occurs in those peculiar house-epidemics, which may prevail in the absence of any special outbreak. Two or four or even five persons may be stricken one after another in the same house with the disease. There are also sporadic forms of the pneumococcus meningitis which occur in these house-epidemics.

An important point which has been discussed in all the epidemics is whether the disease is communicable directly from person to person or not. Is it actually contagious? Do we run any risk in looking after the patients? It probably has the same low degree of contagiousness that we see in pneumonia. It sometimes happens if you have a case of pneumonia in a medical ward, a case will occur in the neighbouring bed, or one of the attendants will be infected, or there may be a small ward epidemic, or in a house one case is followed in rapid succession by three or four other cases. Cerebro-spinal fever behaves in much the same way. Numbers of cases may be in the general ward of a hospital, and the disease may not spread. We had no additional cases in the Johns Hopkins Hospital in a small epidemic there, either among the attendants or among the nurses. On the other hand, there have been instances which demonstrate clearly that the disease