“Spanish Influenza” (Editorial)

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According to current reports, a pandemic of an acute influenza-like disease is passing over Europe, civilized and barbarian. Fortunately the outbreak in England and among the Allied troops on the continent is now on the wane. The disease has been called "Spanish influenza," presumably because it is believed to have started in Spain. In view of the likelihood that the pandemic will reach this country, all observations in regard to its manifestations and nature are of special interest. Thus far, however, most of the articles and notes regarding the disease have been of an ephemeral nature; the more elaborate and finished studies will come later.

The symptoms are described practically always in about the same terms: sudden onset with chills, severe headache, pains in the back and elsewhere, general malaise, flushed face, some soreness of the throat, and fever of from 101 to 104 F., with a rather slow pulse. Usually crisis has occurred after two or three days, with rapid and complete recovery. In many cases there has been a harsh cough with a scanty sputum; occasionally more severe bronchitis and even bronchopneumonia have developed; but among the young and healthy there seem to have been no serious consequences, and no definite statements are made as to the death rate, which in any event thus far has been very low. Gastro-intestinal disturbances have not been observed. Herpes labialis is mentioned as occurring occasionally. Enlargement of lymph nodes is recorded. At the end of the fever there has been found a rather slight leukocytosis, with a relative excess of small lymphocytes, preceded according to some by leukopenia with marked fall in eosinophils.

The observers on whose authority these statements are ventured do not agree as to the bacteriology of the disease. Little, Garofalo and Williamsi of the Canadian Army Medical Corps did not find any influenza [Pfeiffer’s] bacilli in smears or in cultures from the nose, throat and sputum. They found the predominating organism to be a small coccus with many of the characteristics of the streptococcus, but with rather feeble hemolytic power. Gotch and Wittinghamii on the other hand, found a gram-negative coccus, which they speak of as *Micrococcus catarrhalis*, in the nasopharyngeal swabs and sputum of all of fifty cases, sometimes almost pure; further, influenza bacilli in culture in 8 per cent. and influenza-like bacilli in smears in 62 per cent. of the cases, and also other bacteria, such as pneumococci and streptococci, in fewer instances. The experimental implantation of pure cultures of the *Micrococcus catarrhalis* on the pharyngeal mucous membrane was followed by the symptoms of influenza in two persons; hence Gotch and Wittinghan regard this coccus as the cause of the disease, either acting alone or in conjunction with the influenza bacillus. As they give no details in regard to their experimental inoculation, it is quite impossible to form any judgment as to its value. Blood cultures have not yielded any definite results and so far no immunologic tests seem to have been made. In editorial comment, the *British Medical Journal*iii states that the influenza bacillus has been found in many different places, especially in cases with bronchitis and pneumonia, and that the general opinion seems to be that the pandemic is due to the bacillus. This opinion is by no means unanimous, however, and the bacteriologic and other evidence at
hand certainly does not warrant its acceptance. Much further work is required before we can feel sure that we understand the true nature and cause of this and similar pandemics.

The treatment remains symptomatic—rest in bed, free movements of the bowels, and light diet are the most important measures. No doubt the spread of the infection, whatever it is, would be limited considerably if the dangers of droplet infection were recognized more widely and guarded against.


iii The Influenzal Pandemic, Brit. Med. Jour., 1918, 2, 39; The Pandemic of Influenza, ibid., 1918, 2, 91.