

Past progressive

## “The present epidemic”

Although for many commentators the ongoing SARS epidemic has raised the spectre of the influenza pandemic of 1918, so far there is little comparison with respect to scale. Estimates of the number of lives lost to the “Spanish flu” range from 20 million to 100 million; the actual toll, especially in less developed countries, will never be known. Canadian and American soldiers returning from the trenches of the First World War brought the epidemic to North America, where it spread swiftly. In December 1918 *CMAJ* reported that an estimated 40 000 to 50 000 cases and 3500 deaths had occurred in Ontario,<sup>1</sup> and that from the end of September, when the epidemic began its visitation, to early in November, 3028 people had died in Montréal alone.<sup>2</sup> The following passages describing the characteristics of the disease are taken from an unsigned editorial in the November 1918 issue of *CMAJ*. The questions it raises with respect to the identity and virulence of the causative agent are not unlike those faced by SARS investigators today.

Under the name of “Spanish Influenza” an epidemic is sweeping over the North American Continent ... with an alarming morbidity and mortality. It is a rapidly spreading and very contagious disease which involves particularly the respiratory tract, but is associated with marked constitutional disturbances and prostration. It is said to have made its appearance first in Spain, hence “Spanish Influenza.” ...

Its advent on this side of the Atlantic is of recent date. Here, as in other countries, the disease appeared prominently and severely from the start amongst soldiers, where it has been responsible for a high mortality. It appears ... that clinically, two types of cases occur — first, the simple nonpneumonic infection, secondly, the severe and frequently fatal, pneumonic type. This latter is a very dangerous, rapidly progressing, septicæmia with high fever, a curiously slow pulse, often

running an erratic course, which may kill in a surprisingly short time. Between the two is no absolute separation; type 1 may either quickly or sometimes after days develop into type 2, and then rapidly lead to death. It may therefore be supposed ... that in this, as in other epidemic diseases mild infections may, on translation into other individuals, give rise to severe ones. It is noteworthy that the severe type affects with predilection young, strong and plethoric individuals, especially men. ... Cases which have come to autopsy show generally a marked, diffuse, severely hæmorrhagic pneumonia ...

Bacteriologically, the cases appear to be mostly mixed infections. In the majority of cases the pneumococcus, in one or another strain, is recovered from bronchi, lung exudate, and pleural fluid. A number of cases also show influenza bacilli. ... It may be that a symbiosis [*sic*] of several pathogenic micro-organisms such as influenza and pneumonia enhances the virulence of both.

... [T]he disease had not been long with us in this country when announce-

ments in the Daily Press of sera and vaccines appeared. These should be received with a great deal of reserve by the practitioner. In the first place, ... the nature of the infection as well as its extreme virulence in many cases is still obscure. In the second place it appears that most of these cases are mixed infections in which more than one micro-organism is concerned. Thirdly, even if it is taken for granted that the most important factor of this infection is the influenza bacillus, not much hope can be entertained in establishing immunity or cure by influenza vaccines, for the influenza bacillus ... stimulates but very feebly to anti-body formation ... . False hopes should therefore not be entertained by practitioners and laity that vaccine treatment is going to be of much help in this epidemic. ...

From: The present epidemic [editorial].  
*CMAJ* 1918;8(11):1028-30.

### References

1. McCullough. The control of influenza in Ontario. *CMAJ* 1918;8(12):1084-5.
2. Boucher S. The epidemic of influenza. *CMAJ* 1918;8(12):1087-8.

### One thousand words



Men wearing masks during the Spanish influenza epidemic, Alberta, 1918

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