



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



First imported case of 2019 novel coronavirus in Canada, presenting as mild pneumonia

William Kyle Silverstein, Lynfa Stroud, Graham Edward Cleghorn, Jerome Allen Leis

Lancet 2020; 395: 734

Published Online

February 13, 2020

[https://doi.org/10.1016/S0140-6736\(20\)30370-6](https://doi.org/10.1016/S0140-6736(20)30370-6)

50140-6736(20)30370-6

This online publication has been corrected. The corrected version first appeared at thelancet.com on February 27, 2020

Department of Medicine, University of Toronto, Toronto, ON, Canada

(W K Silverstein MD,

L Stroud FRCP,

G E Cleghorn FRCP,

J A Leis FRCP); Division of

General Internal Medicine,

Sunnybrook Health Sciences

Centre, Toronto, ON, Canada

(L Stroud, J A Leis); Division of

Emergency Medicine,

Sunnybrook Health Sciences

Centre, Toronto, ON, Canada

(G E Cleghorn); and Division of

Infectious Diseases,

Sunnybrook Health Sciences

Centre, Toronto, ON, Canada

(J A Leis)

Correspondence to:

Dr Jerome A Leis,

Divisions of General Internal

Medicine and Infectious

Diseases, Sunnybrook Health

Sciences Centre, Toronto,

ON 2075, Canada

jerome.leis@sunnybrook.ca

A 56-year-old man presented to our Emergency Department in Toronto, ON, Canada, with fever and non-productive cough, 1 day after returning from a 3-month visit to Wuhan, China. Given this travel history, the transferring ambulance and receiving hospital personnel used appropriate personal protective equipment. He had a medical history of well controlled hypertension. On examination, his maximum temperature was 38.6°C, oxygen saturation was 97% on room air, and respiratory rate was 22 breaths per min—without any signs of respiratory distress. Laboratory investigations showed mild thrombocytopenia (113×10^9 per L, normal 150–400), haemoglobin concentration 146 g/L (normal 130–180), white blood cell count 7.4×10^9 per L (normal 4–11), creatinine concentration 81 $\mu\text{mol/L}$, alanine aminotransferase 29 IU/L (normal <40), and lactate concentration 1.1 mmol/L (normal 0.5–2.0). A chest x-ray showed patchy bilateral, peribronchovascular, ill-defined opacities in all lung zones.

Considering the clinical presentation of viral pneumonia in a patient with the appropriate epidemiological risk, the patient was admitted as a probable case of 2019 novel coronavirus (2019-nCoV) infection. The public health authority was notified of the case on admission and it traced the contacts. Mid-turbinate swabs were negative for influenza virus A and influenza virus B, parainfluenza virus, respiratory syncytial virus, adenovirus, and human metapneumovirus. Coronavirus was detected in both mid-turbinate and throat swabs by PCR and confirmed as 2019-nCoV by sequencing. 1 day after admission to hospital, the patient developed mild haemoptysis

and significant rhinorrhoea, but he remained otherwise well. His intermittent fever lasted 5 days before fully resolving, and his platelet count normalised; he was discharged home and followed up by public health workers.

We believe this is the first confirmed case of 2019-nCoV in Canada. The presentation with fever, cough, and bilateral pneumonia is typical of most cases described so far. However, only a minority of previously reported cases had thrombocytopenia—and this was a worrying feature in our patient. Yet despite significant radiographic abnormalities, our patient remained well and did not require intubation or supplemental oxygen—unlike many cases with similar x-ray findings reported so far. This case highlights the milder spectrum of pneumonia caused by 2019-nCoV. Further, it suggests that the identification of individuals—like our patient—who could be managed by being isolated at home, rather than in hospital, might be an important strategy for containing this outbreak.

Contributors

All authors were involved in the diagnosis, management, and care of the patient. All authors contributed equally to writing the manuscript. Written consent for publication was obtained from the patient.

Acknowledgments

We would like to thank the nursing staff involved in this patient's care, Infection Prevention and Control team members, as well as Anastasia Oikonomou, Manpreet Basuita, Shubhabrata Das, and Zachary Feilchenfeld

© 2020 Elsevier Ltd. All rights reserved.



Figure: First case of 2019 novel coronavirus in Canada

Chest x-ray shows bilateral, peribronchovascular, ill-defined opacities in all lung zones.