



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.

Atypical presentation of COVID-19 in young infants

As of April 27, 2020, more than two million people worldwide have been diagnosed with coronavirus disease 2019 (COVID-19), with Europe being one of the current major clusters of the pandemic.¹ Despite an absence of evidence, children have been targeted as a potential source of children-to-adult virus dissemination, and schools have been closed in most countries. However, findings seem to indicate a lower susceptibility of children to COVID-19 and low contagiousness.² Within 7 days of imposed population quarantine in France (initiated on March 17, 2020), we observed an increase in number of young infants with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.

In our paediatric hospital, patients presenting with fever or respiratory symptoms, or both, and requiring admission to hospital are admitted to a dedicated SARS-CoV-2 infection unit. During the first week of quarantine, 14 infants younger than 3 months were admitted to this unit, and five of these young infants were diagnosed with COVID-19 on the basis of nasopharyngeal swabs positive for SARS-CoV-2. Their clinical presentations differed from those reported in articles about children with COVID-19,^{3,4} which present little data from younger infants.

The five infants with COVID-19 were boys. They had been healthy, but were admitted with poorly tolerated and isolated fever (appendix). None of the boys received non-steroidal anti-inflammatory drugs before admission, they had no respiratory symptoms before or during hospitalisation (in contrast with published data⁵), and they did not need intensive care (chest x-rays are provided in the appendix).

Four of the boys showed neurological symptoms at admission, such as axial hypotonia or drowsiness and moaning sounds, or both (appendix),

which prompted us to do lumbar punctures. Cerebrospinal fluid samples were normal and tested negative for SARS-CoV-2 by RT-PCR. The infants received no drugs other than acetaminophen. Their clinical course was rapidly favourable, which allowed hospital discharge 1–3 days after admission. A dedicated paediatrician supervised the follow-up, which consisted of a daily phone call using a standardised questionnaire for 2 weeks.

Here we describe our experience of COVID-19 in five young infants. In the pandemic context, infants younger than 3 months with isolated fever should be tested for SARS-CoV-2. Although infants might initially present signs of severe infection, our experience is that the youngest children tolerate and rapidly improve from COVID-19, in contrast to adults admitted to hospital with COVID-19. However, because little is known about SARS-CoV-2 infection in infants,^{4,6} close monitoring is required for at least 2 weeks after the diagnosis. All of the infants' parents showed mild signs of viral infection (ie, rhinitis, or cough or fever, or both, for <1 week), which could be related to undiagnosed COVID-19.

We declare no competing interests.

**Nadia Nathan, Blandine Prevost,
*Harriet Corvol**
harriet.corvol@aphp.fr

Paediatric Pulmonology Department and Reference Centre For Rare Lung Disease RespiRare, Trousseau Hospital, Assistance Publique-Hôpitaux de Paris, Paris 75012, France (NN, BP, HC); and Sorbonne Université, Centre de Recherche Saint Antoine, Paris, France (HC)

- 1 WHO. Coronavirus disease 2019 (COVID-19) situation report – 93. April 22, 2020. https://www.who.int/docs/default-source/coronavirus/situation-reports/20200422-sitrep-93-covid-19.pdf?sfvrsn=35cf80d7_4 (accessed April 23, 2020).
- 2 Lu X, Zhang L, Du H, et al. SARS-CoV-2 infection in children. *N Engl J Med* 2020; **382**: 1663–65.
- 3 Dong Y, Mo X, Hu Y, et al. Epidemiological characteristics of 2143 pediatric patients with 2019 coronavirus disease in China. *Pediatrics* 2020; **145**: e20200702.
- 4 Qiu H, Wu J, Hong L, Luo Y, Siong Q, Chen D. Clinical and epidemiological features of 36 children with coronavirus disease 2019 (COVID-19) in Zhejiang, China: an observational cohort study. *Lancet Infect Dis* 2020; published online March 25. [https://doi.org/10.1016/S1473-3099\(20\)30198-5](https://doi.org/10.1016/S1473-3099(20)30198-5).

- 5 Sun D, Li H, Lu XX, et al. Clinical features of severe pediatric patients with coronavirus disease 2019 in Wuhan: a single center's observational study. *World J Pediatr* 2020; published online March 19. DOI:10.1007/s12519-020-00354-4.
- 6 Wang J, Shi Y. Managing neonates with respiratory failure due to SARS-CoV-2—Authors' reply. *Lancet Child Adolesc Health* 2020; **4**: e9.



Published Online
April 27, 2020
[https://doi.org/10.1016/S0140-6736\(20\)30980-6](https://doi.org/10.1016/S0140-6736(20)30980-6)



Published Online
April 27, 2020
[https://doi.org/10.1016/S0140-6736\(20\)30979-X](https://doi.org/10.1016/S0140-6736(20)30979-X)

This online publication has been corrected. The corrected version first appeared at thelancet.com on May 7, 2020

What does it mean to be made vulnerable in the era of COVID-19?

We read with interest the Editorial¹ about redefining vulnerability in the era of coronavirus disease 2019 (COVID-19). The Editors recognise underserved and marginalised populations enduring the COVID-19 pandemic, and that the category of vulnerable individuals or groups is not fixed but evolves in response to policies that might create or reinforce vulnerability. When we ask what being vulnerable means, are we also creating the spaces needed to question what it means to be made vulnerable?

The Editors' opening question, "What does it mean to be vulnerable?"¹ strongly suggests that more groundwork is needed to shift the landscape from an individual pathologising of capacity, autonomy, and agency to the identification of divisions that define vulnerability within cultures, communities, and particular social groups.

Although the particular needs of vulnerable groups must be accounted for in health policy, guidance, and practice at the frontline of crises, these needs reflect existing contextual, rather than individual, injustices and thus require reparation.

The lived experiences of vulnerable groups are defined by a form of epistemic injustice²—the dismissal of the knowledge of their own lives and needs that socially marginalised groups experience. Such knowledge should have a vital role in pandemic response, such as triage protocols to prevent further health disparities

See Online for appendix

Submissions should be made via our electronic submission system at <http://ees.elsevier.com/thelancet/>