

SYNOPSIS

03/03/2020

Review of “A case series of children with 2019 novel coronavirus infection: clinical and epidemiological features”

Article citation: Cai J, Xu J, Lin D, Yang z, Xu L, Qu Z, et al. A case series of children with 2019 novel coronavirus infection: clinical and epidemiological features. Clin Infect Dis. 2020 Feb 28 [Epub ahead of print]. Available from: <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaa198/5766430>

One-Minute Summary

- The authors report on a **case series of children (N=10)** infected with coronavirus disease 2019 (COVID-19) in three cities in China, who were admitted to hospital between January 19 and February 3, 2020. The children presented with mild respiratory symptoms.
- Of the 10 children:
 - Six were female
 - Ages ranged from 3 months to 10 years (mean: 6 years)
 - Eight had direct contact with an adult case and two had exposure to an epidemic region in China
- **Mean incubation period** (based on eight children): 6.5 days (range: two to 10 days)
- Symptoms included:
 - Fever (80%), with resolution within 24 hours of onset
 - Cough (60%)
 - Sore throat (40%)
- Unilateral patchy infiltrates were observed on chest radiography in 40% of the cases.
- Among children (n=7) exposed to household adult cases, the **mean number of secondary symptomatic cases** including the child was 2.43 (range: 1-4).
- As of February 19, **all patients had been discharged** following two consecutive negative respiratory samples.

Additional Information

- The authors suggest a longer incubation period in children compared to adults.
- COVID-2019 was detected in nasopharyngeal and throat swabs using real-time RT-PCR within four to 48 hours of symptom onset and was undetectable within six to 22 days (mean 12 days) after onset.
- Diarrhea was not reported as a symptom in any of the children included in this case series, but COVID-19 RNA was detected within three to 13 days after illness onset in the feces of five of the

six patients tested. Further, prolonged viral shedding (two weeks to one month) in feces was observed, suggesting the gastrointestinal tract may be another site of viral replication.

- Radiographic evidence of pneumonia was characteristic at early stages of infection, thus close observation is necessary for children with mild symptomatic or asymptomatic infection.

PHO Reviewer's Comments

- The sample size of children infected with COVID-19 (N=10) was small and it is therefore possible that these results may not be generalizable to all children.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Review of "A case series of children with 2019 novel coronavirus infection: clinical and epidemiological features". Toronto, ON: Queen's Printer for Ontario; 2020.

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