

Newborn may have contracted coronavirus in the womb

May 15 2020, by E.j. Mundell, Healthday Reporter



(HealthDay)—A Canadian newborn is a "probable" case of infection

with the new coronavirus while still in the womb, doctors report.

Other such cases have been suspected and reported in prior studies. But the mother's active case of COVID-19, along with the fact that the [baby boy](#) was delivered via C-section, add weight to the notion that maternal-fetal transmission of the SARS-CoV-2 virus can occur, the Toronto doctors concluded.

There was good news, however: Although the baby was born preterm (about 36 weeks), he was a healthy 6.5 pounds. And even though testing positive for coronavirus, he did not develop COVID-19.

Still, the case "represents a probable case of congenital SARS-CoV-2 [infection](#) in a liveborn neonate," said researchers led by pediatrician Dr. Prakesh Shah, of Toronto's Mount Sinai Hospital. They published their report May 14 in the *Canadian Medical Association Journal*.

As Shah's group noted, prior studies from China have already confirmed coronavirus infection in newborns born to women infected with the new coronavirus. But it's been tough to ascertain whether the infant picked up the infection via contact with the vaginal canal during birth, or by being held by the mother, or by breastfeeding.

In the new case, a 40-year-old pregnant woman arrived at the hospital to deliver her baby. She was already suffering from active COVID-19, with body aches, reduced appetite, fatigue, dry cough and a fever of 102 degrees Fahrenheit.

Luckily, she did not require any respiratory support, her doctors said, but it was decided that the woman undergo a "semi-urgent" C-section.

Her baby boy was "vigorous" upon birth and didn't require any help breathing. However, nasal swab tests conducted at birth, one day after,

and then again seven days after, all turned up positive for infection with the new coronavirus.

It's impossible to confirm that the infant contracted the virus while still in the womb, but Shah's team wrote that the woman did have reduced immune system function, which would leave her body more vulnerable to the virus.

As well, testing of her placenta revealed inflammation in those tissues that was "consistent with primary viral infection," the doctors said.

The baby boy had not come in contact with the woman's vaginal tract during his C-section delivery, and all precautions were taken (masks, gloves, etc.) to minimize the spread of coronavirus from mom to newborn in the hours after birth.

So, "we suspect the possibility of a transamniotic route of [coronavirus] infection via the placenta," the team wrote.

Dr. Adi Davidov is associate chair of gynecology at Staten Island University Hospital in New York City. Reading over the Toronto findings, he said, "This is the first report that clearly shows that there is a small possibility that COVID can be transmitted in utero."

Davidov added that although people primarily think of SARS-CoV-2 as invading the [respiratory tract](#), "it can occasionally be found in other areas of the body," and that may include the uterus and placenta.

Still, maternal-fetal transmission of coronavirus probably isn't common, he believes.

"Given that we have now delivered hundreds of mothers infected with the SARS-CoV-2 and we have not seen this phenomenon, it is pretty

safe to assume that this is a rare phenomenon," Davidov said.
"Nonetheless, it is important for clinicians to be aware of this situation and to screen all newborns for COVID-19."

Shah and his colleagues added that it's important for [health care workers](#) caring for newborns to understand the potential hazard.

"All [health care providers](#) attending an infected woman's delivery and caring for the baby in the NICU should recognize this risk and use appropriate personal protective equipment to prevent droplet, contact and aerosol transmission [of the coronavirus]," they said.

More information: The U.S. Centers for Disease Control and Prevention has more on the [new coronavirus](#).

Copyright © 2020 [HealthDay](#). All rights reserved.

Citation: Newborn may have contracted coronavirus in the womb (2020, May 15) retrieved 2 May 2024 from <https://medicalxpress.com/news/2020-05-newborn-coronavirus-womb.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--