



COVID-19 in pregnancy with comorbidities: More liberal testing strategy is needed

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Manuscripts

COVID-19 in pregnancy with comorbidities: More liberal testing strategy is needed

Sir,

Despite a global pandemic, reports on pregnant women with Coronavirus disease 2019 (COVID-19) are few so far, testing strategies vary substantially and management guidelines are not uniform.^{1,2}

A 34-year-old primipara with a dichorionic twin pregnancy was referred to our hospital at 36^{2/7} weeks due to hypertension and proteinuria. Her BMI at the first antenatal visit was 38 kg/m² and she was diagnosed with gestational diabetes at 29 weeks. Fetal growth was normal, and both fetuses were in cephalic presentation.

She presented with mild headache, hoarseness and increasing malaise for three days but no cough or dyspnea. Her heart rate was 85 beats/min, respiration rate 11/min, oxygen saturation 96%, blood pressure (BP) 170/100 mmHg and the body temperature was 38.0° Celsius. Creatinine was 89 µmol/L (reference <90 µmol/L) and uric acid 510 µmol/L (reference 155-350 µmol/L). Other lab results including C-reactive protein (CRP), hemoglobin, leukocytes, platelets, liver enzymes were unremarkable. A nasopharyngeal COVID-19 RNA test was taken. She was admitted to an isolation room, and treated with paracetamol, labetalol and nifedipine. The staff caring for her used personal protective equipment.

Seven hours later, her the BP remained high despite antihypertensive treatment, she complained of severe headache and photophobia, and her patellar reflexes were brisk. Intravenous magnesium sulphate infusion was started. An emergency cesarean was performed under spinal anesthesia and antibiotic prophylaxis (cefuroxime 1.5 g intravenously) was administered. The estimated blood loss was 200 mL. Two female babies were delivered in good condition.

Three hours later, the mother's COVID-19 test result was reported to be positive. Her BP remained stable and the temperature normalized after the first post-operative day. On the third day, her oxygen saturation dropped to 87%, which was managed successfully with oxygen, 1-3 L/min via a nasal cannula. A computerized tomography scan of the chest ruled out pulmonary embolism but showed typical signs of COVID-19 pneumonia. The CRP reached

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3 88 mg/L on the fourth day but fell to 38 mg/L on the sixth day. Oxygen therapy was
4 discontinued on the fifth post-operative day and she was discharged on the sixth day fully
5 mobilized, without dyspnea, and with well-controlled BP.
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9 The twin baby girls were assessed by a pediatrician immediately after birth and could be
10 roomed-in with their mother after 10 minutes. Because of maternal gestational diabetes, both
11 twins were formula fed from the start and breastfeeding was initiated simultaneously.
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15 Twin-1 had a birthweight of 2680 g, with Apgar scores of 9, 10 and 10 at 1, 5 and 10 minutes,
16 respectively. At 22 minutes after delivery she developed breathing problems and continuous
17 positive airway pressure was administered for 40 minutes. On the second day, she had a
18 cyanotic-attack while feeding, which was interpreted as secondary to vomiting/gastro-
19 intestinal reflux. Oxygen saturation directly after the event was normal. Twin 2 was smaller
20 with a birthweight of 2160 g, and Apgar scores 9, 10 and 10.
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26 Both twins had negative nasopharyngeal Covid-19 tests taken at 34 hours and 4½ days of age.
27 Covid-19 tests performed on breastmilk and maternal vaginal secretion on the fifth day and
28 were also negative.
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32 This case of a twin pregnancy with severe preeclampsia that was complicated by Covid-19
33 illustrates the potential difficulties in discriminating common complications encountered in
34 high-risk pregnancies with comorbidities, such as pulmonary edema/embolism, from COVID-
35 19. Therefore, liberal testing for COVID-19 should be considered in women with high-risk
36 pregnancies.
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