

Multiple drugs

OS

Various toxicities due to morphine overdose and maternal exposure during pregnancy: case report

A 26-year-old woman developed somnolence, lethargy and miotic pupils following morphine overdose. Additionally, she received anti-D-Rh0-immunoglobulin, betamethasone, cefotaxime, dalteparin-sodium, levothyroxine-sodium, morphine, oxycodone and paracetamol during third trimester of her pregnancy [*not all dosages and routes stated*].

The pregnant woman (gravida 2 and para 1), who had history of hypothyroidism and obesity presented to the emergency department at 32⁺¹ weeks of gestation. Subsequently, on day 2, she was diagnosed with SARS-CoV-2 infection. In 2015, she had a normal vaginal delivery. She was currently receiving levothyroxine-sodium [levothyroxine] 150 µg/day for hypothyroidism. She also received an IM injection of anti-D-Rh0-immunoglobulin [anti-D immunoglobulin] at 28⁺⁵ weeks of gestation. On admission, she had significant abdominal pain and also noticed reduced fetal movements for the last 2 days. Subsequently, she was started on paracetamol, oxycodone and morphine for pain relief and also received SC dalteparin-sodium [dalteparin] 7500 units/day for thromboprophylaxis. On day 2, due to risk for preterm labour, she received IM betamethasone 12mg to aid fetal lung maturity. On day 3 she was discharged. However, she returned to the emergency department the next day on 20 April 2020 with severe difficulties in swallowing, a sore throat, tachypnoea and tachycardia. After examination, she was discharged with a prescription of betamethasone tablets for 3 days (6, 4 and 3mg) for swallowing difficulties along with potassium supplements for the hypokalaemia noted during the blood tests. She was again readmitted the next day on 21 April 2020 with worsened COVID-19 symptoms. Her condition deteriorated further. Besides the generalised pain and tenderness, the pain in her right upper abdomen had worsened with suspected atypical HELLP (haemolysis, elevated liver enzymes and low platelet count) syndrome along with severe liver and coagulation impairment. She was initiated on IV cefotaxime 2g thrice daily due to suspicion of concomitant bacterial infection.

An emergency caesarean section was performed during third trimester leading to preterm delivery at gestational week 32⁺⁶ weeks. A male baby was delivered with birth weight 2085g and Apgar score of 4, 6 and 8 at 1, 5 and 10 minutes, respectively. Post-operatively, she received 2.5mL of IV morphine as required for pain relief. However, her condition worsened and she became somnolent and lethargic. Examination showed miotic pupils that reacted poorly to light stimulation. A morphine overdose was suspected, even though she received 7.5mg of morphine over the course 8 hours. Thus, morphine was replaced by a combination of oral oxycodone and naloxone. She recovered rapidly. There was no evidence of vertical transmission of COVID-19 from mother to baby [*time to reactions onset not stated*].