

3. CASE REPORT OF SEVERE COVID-19 PNEUMONIA IN A TERM NEWBORN

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Introduction. Coronavirus disease (COVID-19) has been shown to affect all age groups. The data in the literature usually admit a milder form of disease in newborns than adults. According to case reports in Europe, some reported newborns had fever and dyspnoea and had mechanical ventilation for several days. Their average age at diagnosis was 5 days. Because of these reports, we should carefully and rapidly diagnose newborn cases for the prognosis of the disease.

Case presentation. Patient X, female, age 4 days, weight 3500 g. She is hospitalized on the 5th day of illness. COVID-19 PCR test was positive on the second day of life. He received antibiotic therapy for 3 days. Child born from pregnancy II, birth II, at 39 weeks, weighing 4000 g, natural birth, Apgar score 8/9p. Physical examination revealed hoarseness, rare dry cough, rhinorrhea, jaundiced skin, fever up to 37.20C, periodically restless, capricious child. Bilateral shortness breath, obstruction, absent rales. Cardiovascular examination revealed no pathology. The baby was transferred to our neonatal intensive care unit and pre-diagnosed as having respiratory distress, pneumonia. The baby was isolated. Blood gas parameters were pH= 7.45, pCO₂= 38.0 mmHg, pO₂= 34.1 mmHg, HCO₃ = 25.9 mEq/l, BE= 0.9 mmol/l, lactate: 6.6 mmol/l. Complete blood count, WBC= 9.5/μL, lymphocytes ratio = 67%, Hg= 19.2 g/l, HCT= 58.1%, PLT= 163 × 10⁹/l and biochemical parameters (liver and renal function tests) total bilirubin was 224 μmol/l, more in normal ranges in accordance with the age of the baby. Bacteriological investigation of sputum - *Klebsiella pneumoniae*. Chest X-ray revealed bilateral pneumonia. Scor brixia-5. Lung damage-25%. We started to treat the baby according to the guidelines, on the first day of hospitalization. On the 10th day of hospitalization, D-dimers are raised, the blood is thick, a clot forms immediately, anticoagulant treatment is initiated. COVID-19 PCR test was positive. Hb 192 g/l, WBC 12,0/μL. Chest X-ray- Pneumonia on the left. Obstructive syndrome. Brixia-3 score. Lung damage-15%. We discharged the baby on postnatal Day 20 with positive dynamic.

Discussion. Previously reported cases of COVID-19-infected newborns were especially about non-symptomatic or mildly symptomatic babies who never received strict respiratory support. We aimed to present this report because this case was one of the most interesting cases reported in newborns, this case having early symptoms that began in the perinatal period of life and progressed to severe pneumonia.

Conclusion. Our case of severe COVID-19 pneumonia was a rare presentation of infection in a neonate. Most of the neonatal COVID infections are widely reported to be asymptomatic or mild in presentation. It has been reported that the clinical course is more severe in preterm babies. The available data on newborn outcomes, and the postnatal care practices used in the context of these outcomes, suggest that a reframing of the perceived neonatal risk imposed by SARS-CoV-2 is necessary. Neonatologists should bear in mind the possibility of a term neonate presenting with severe COVID-19 infection.