



Kovid-19 infekcija kod novorođenčeta

COVID 19 Infection in Newborn Infants

Dragana Savić, Mira Avramović, Tijana Prodanović, Suzana Živojinović

Univerzitetski klinički centar Kragujevac

University Clinical Center Kragujevac

Apstrakt

Sa početka pandemije korona-virusom primarno je inficirana adultna populacija, sa niskom incidencom kod dece. U ovom radu prezentujemo slučaj ženskog novorođenčeta, rođenog u terminu u 38. nedelji gestacije vaginalnim porođajem, sa SARS-CoV-2 infekcijom. Prva 3 sata života novorođenče je bilo bez tegoba, da bi došlo do naglog pogoršanja opšteg stanja praćenog hipoksemijom, visokom temperaturom i nespecifičnim znacima akutnog respiratornog distresa. U drugom danu je u terapiju uključen kiseonik, a od trećeg dana je novorođenče intubirano. Radiografija pluća napredovala je od jednostranih zona konsolidacije do obostrane slike „mlečnog stakla”. Analize krvi ukazivale su na porast vrednosti C reaktivnog proteina, prokalcitonina, D-dimera, feritina i pro BNP-a. U terapiju su uključeni antibiotici, niskomolekularni heparin (prokalcitonina, D-dimera, feritina i pro BNP-a), niskomolekularni heparin (clexane) i kortikosteroid (dexason). Krajem četvrtog dana hospitalizacije klinički nalaz se značajno pogoršao tahipneom sa dispneom uz cijanozu i tahikardiju, što je rezultiralo povećanom potrebom za kiseonikom (95% na pritisak kontrolisanoj ventilaciji) bez značajnijeg oporavka, uz značajan skok IL6. Izmena opšteg stanja rezultirala je razvojem plućne hipertenzije u sklopu kovid-19, izazvanom distres sindromom, koja je medikamentozno lečena. Korigovana je anti-biotska terapija, uz dodatak tocilizumaba.

Zaključak: Prikazali smo, prema našim saznanjima, prvo obolelo novorođenče sa SARS-CoV-2 infekcijom, razvijenom u trećem satu života, kao i naše iskustvo u lečenju. Cilj je bolje razumevanje mehanizma osnovne bolesti, kao i izrada jedinstvenih smernica.

Abstract

Since the beginning of the Coronavirus pandemic, the adult population has been primarily infected, with a low incidence in children. In this paper, we present the case of a female newborn, born at term at 38 weeks of gestation by vaginal delivery, with SARS-CoV-2 infection. For the first 3 hours of life, the newborn was uncomplicated, before a sudden worsening of the general condition followed by hypoxemia, high temperature, and non-specific signs of acute respiratory distress. On the second day, oxygen was included in the therapy, and on the third day the newborn was intubated. Radiography of the lungs progressed from one-sided zones of consolidation to a bilateral “ground-glass” image. Blood analyses indicated an increase in the values of C reactive protein, procalcitonin, D-dimer, ferritin, and pro-BNP. Antibiotics, and low-molecular-weight heparin (procalcitonin, D-dimer, ferritin, and pro-BNP) were included in the therapy. Antibiotics, low-molecular-weight heparin (Clexane), and corticosteroid (Dexason) were included in the therapy. At the end of the fourth day of hospitalization, the clinical findings significantly worsened with tachypnea dyspnea with cyanosis and tachycardia which resulted in an increased need for oxygen (95% on pressure-controlled ventilation) without significant recovery with a significant jump in IL6. The change in the general condition resulted in the development of pulmonary hypertension as part of the COVID-19-induced distress syndrome which was medically treated. The antibiotic was corrected therapy, with the addition of Tocilizumab.

Conclusion: We presented, to our knowledge, the first sick newborn with SARS-CoV-2 infection developed in the third hour of life, as well as our experience in treatment. The objective is a better understanding of the underlying disease mechanism, as well as the development of unique guidelines.

