Abstract

Statement of Problem: To study the effects of comparison a complete course with an incomplete course of dexamethasone on the incidence of respiratory distress syndrome in newborn infants aged below 34 weeks.

Methodology & Theoretical Orientation: A retrospective cohort study conducted on 118 pregnant patients at 24-33+6 weeks of gestation. The sample was divided into two groups: the first group consisting of 63 pregnant patients who received an incomplete course of dexamethasone (< 4 doses) prior to delivery and the second group comprising 55 pregnant patients who received a complete course of dexamethasone prior to delivery (within 14 days after the first dose). Data were collected from electronic medical records to obtain information about the baseline characteristics of the sample, as well as the number of doses of dexamethasone received and the incidence of respiratory distress syndrome (RDS), intraventricular hemorrhage (IVH), necrotizing enterocolitis (NEC), early-onset neonatal sepsis (EOS), and neonatal death.

Findings: The rates of RDS incidence and neonatal death amongst pregnant patients who received a complete course of dexamethasone significantly decreased from 74.6% to 50.9% (AOR, 0.37; 95%CI, 0.17-0.84) and from 12.7% to 1.8% (AOR, 0.10; 95%CI, 0.01-0.98), respectively, when compared with pregnant patients who received an incomplete course of dexamethasone. Alternatively, there were no statistically significant differences between the two groups in terms of the incidence of IVH, NEC, patent ductus arteriosus (PDA), NICU admission within the first 7 days of birth, and surfactant requirement. Meanwhile, the incidence rate of EOS increased from 19% to 26.5% (AOR, 3.18; 95%CI, 1.13-8.97).

Conclusion & Significance: The administration of a complete course of dexamethasone to pregnant patients with gestational age of less than 34 weeks is conducive to a decrease in the incidence of RDS and neonatal death, while contributing to an increased incidence of EOS.

Biography

Panupan has completed his bachelor’s degree from Mahidol University and completed OB/GYN residency programs from Maharat Nakhon Ratchasima Hospital. He published this research first times.