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THE RELATION OF STRESSES OF PREMATURE LABOR TO
RESPIRATORY DISTRESS SYNDROME (RDS). Bernardino
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The relation between fetal stress in premature labor and the occurrence of RDS in the neonatal period was studied by analysis of the intrapartum fetal heart rate (FHR) monitoring records in 80 appropriate for gestational age preterm newborns. Thirty patients (Grp.1) had no neonatal complications and 50 (Grp.2) developed RDS. A system was established grading FHR patterns according to their severity, duration and association with baseline FHR changes. Late deceleration (LD) and moderate or severe variable deceleration (VD) were found in 80% of these premature fetuses and in 34% they were present for more than 1 hour or were associated with baseline tachycardia or bradycardia. When these last specific FHR patterns were present, 63% of the patients had 1 min. Apgar score <7 and 89% developed RDS, as compared to only 19% and 49% respectively when these patterns were absent. Because of an uneven distribution of LD and VD across gestational age (GA), statistical analysis was limited to patients in the GA range of 32-34 weeks (11 from Grp.1 and 13 from Grp.2). Fetuses with LD or VD, either prolonged or accompanied by baseline FHR changes, had a higher incidence of RDS in the neonatal period ($p=0.01$). The results indicate that stresses of labor and delivery predispose to the development of RDS in the preterm newborn.
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