SHORT TERM OUTCOMES IN TERM NEWBORNS TRANSFERRED FOR RESPIRATORY DISTRESS AND/OR FAILURE FROM PRIMARY AND SECONDARY CARE CENTERS

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Objective: Describe mortality and short term morbidity in term newborns transferred from type 1 and type 2 perinatal care centers for respiratory distress and/or failure by specialized pediatric transport teams.

Design: Retrospective observational cohort study by review of transport and destination charts.

Setting: Two departmental specialized pediatric emergency mobile units.

Patients: Every term newborn less than three days of life transferred for respiratory distress and/or failure born at home or in type 1 and 2 perinatal care center during year 2007.

Main outcome measures: Mortality and invasive ventilation for more than five days.

Results: There were 247 transfers of term newborns for respiratory distress and/or failure corresponding to defined criteria. 66% concerned boys. Origin of respiratory symptoms was respiratory in 69%, neurological in 22.4% and cardio-circulatory in 8.6% of cases. 70.4% of transferred newborns had severe respiratory distress and/or failure necessitating tracheal intubation. Death occurred in 8.6%, with neurological origin of respiratory failure and low birth weight being two independent factors associated with mortality. Invasive ventilation for more than 5 days was present for 19% of transferred newborns and 27% of intubated newborns. Neurological origin of respiratory distress and/or failure, masculine sex and time from the beginning of respiratory symptoms to intubation were three independent factors associated with tracheal ventilation for more than five days.

Conclusion: Respiratory distress and/or failure in term newborns transferred from type 1 and 2 perinatal care centers is associated with significant mortality and short term morbidity defined as invasive ventilation for more than five days.