

## THE INCIDENCE AND RISK FACTORS OF BRAIN INJURY IN MULTIPLE PREGNANCY PRETERM INFANTS

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**Background:** Preterm infants have been shown to be prone to brain damage, which affect their future quality of life.

**Objective:** The retrospective study is to evaluate the incidence and the risk factors of brain injury for multiple pregnancy preterm infants.

**Methods:** 72 multiple pregnancy preterm infants and 99 single pregnancy preterm infants (28-35 wk of gestational age and 600-2410g of weight at birth) were studied. The incidence and risk factors of brain injury were analyzed by way of multiple regression analyses.

**Results:** Compared with single pregnancy preterm infants, multiple pregnancy preterm infants had higher incidence rate of brain injuries (32/72 vs 27/99,  $P < 0.01$ ). The more of the pregnancy number, the less of the infants weight, the less of gestational age, the higher of the brain injuries incidence rate. For infants at gestational age  $\leq 30$  weeks, the brain injury incidence rate was higher than single pregnancy preterm infants (67.9% vs 43.6%). The group of weight  $\leq 1500$ g had higher incidence rate of brain injury. There's no difference between groups of multiple pregnancy preterm infants and single pregnancy preterm infants. The main risk factors are pregnancy-induced hypertension syndrome, asphyxia, fetal distress, amniotic fluid meconium III degree pollution, NRDS, frequent breath stops, hypoglycemia, neonatal hyperbilirubinemia.

**Conclusion:** The preterm brain injuries occur more often in multiple pregnancy preterm infants, which were related to many factors.