Abstract
Some experimental work suggests that exposure to in-trauterine infection is associated, not only, with lung maturation and a reduced risk of respiratory distress syndrome, but also, with delayed alveolarization and increased risk of bronchopulmonary dysplasia. Aim: To evaluate the association between histological cho-rioamnionitis and lung disease in extremely low birth weight preterm infants. Methods: A retrospective chart review of 63 less than 1000 g birthweight, appropria-ted for gestational age neonates, delivered at three ter-tiary medical centers in the north of Portugal, between 2001 and 2002. The association between histological chorioamnionitis and lung damage (respiratory distress syndrome and bronchopulmonary dysplasia) was eva-luated through the calculation of crude and adjusted odds ratio. Results: There were 32 newborns from mothers with histological chorioamnionitis and 31 with-out the condition. The association between histological chorioamnionitis and respiratory distress syndrome was OR 0.23 (95% CI 0.01 - 2.51). The association between chorioamnionitis and bronchopulmonary dysplasia was OR 1.61 (95% CI 0.38 - 6.97). The associa-tion between histological chorioamnionitis and bron-chopulmonary dysplasia when adjusted for gestational age, multiple birth and C-section revealed no statistical significance: OR 2.66 (95% CI 0.36 - 19.60) for chorioamnionitis without funisitis or vasculitis and OR 1.68 (95% CI 0.25 - 11.18) for funisitis and/or vasculitis. Conclusion: In this study we could not confirm a decreased risk of respiratory distress syndrome nor an increased risk of bronchopulmonary dysplasia in ex-tremely low birth weight preterm neonates with histo-logical chorioamnionitis.

Keywords
Chorioamnionitis, bronchopulmonary dysplasia, respiratory distress syndrome.