

ARE PRETERM INFANTS TREATED WITH SURFACTANT LIKELY TO HAVE THE SAME RESPIRATORY OUTCOMES AND QUALITY OF LIFE AS THOSE WHO DID NOT NEED SUCH TREATMENT?

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Background and aim: The present study was performed as part of the multicenter, prospective observational trial NEO-ACQUA (NEOnatal Adequate Care for QUALity of Life) conducted in 25 tertiary level NICUs with the aim of investigating the differences between preterm infants treated or not with surfactant in terms of respiratory outcomes and QOL.

Methods: 150 preterm infants (gestational age ≤ 29 weeks and/or birth weight ≤ 1500 grams), with no documented neurological pathologies, and no sensory deficits were divided in two groups: surfactant treatment at any time (group A, n=89) and no surfactant treatment (group B, n=61). At the 18 months two main outcomes were evaluated: use of respiratory drugs (bronchodilators and inhaled corticosteroids) and QOL assessed by means of the TAPQOL questionnaire.

Results: The demographics showed significant differences in BW (grams \pm SD): group A 1067.9 ± 242.1 vs group B 1236.0 ± 189.3 ($p < 0.0001$) and Apgar score: group A 7.3 ± 1.6 vs group B 8.4 ± 1.0 ($p < 0.0001$). Lung score in the TAPQOL (bronchitis, difficulty breathing or lung problems, short of breath) did not differ in group A and B as well as the percentage of infants treated with respiratory drugs. QOL measured with the TAPQOL was equal in both groups.

Conclusions: In spite of a lower BW and Apgar score, premature infants treated with surfactant for RDS are likely to have the same respiratory outcomes and QOL at 18 months as those of preterms with less severe clinical condition that did not need surfactant.

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