RESPIRATORY SYNCYTIAL VIRUS BRONCHIOLITIS: IMMUNOPROPHYLAXIS AND CLINICAL MANAGEMENT

G. Buonocore, M.L. Tataranno, S. Negro, S. Perrone, C.V. Bellieni, D. Palombo, G. Stazzoni, M. Tei, A. Mori, A. Picardi

Department of Pediatrics, Obstetrics and Reproductive Medicine, University of Siena, Siena, Italy

Background and aims: Bronchiolitis is the major cause of hospitalization in the first 12 months of life. The most common isolated agent is respiratory syncytial virus (RSV). Our aim was to investigate the infectious agents, clinical management and length of stay in hospital of babies with bronchiolitis.

Methods: 153 children (127 at term and 27 preterm) between 2007 and 2010 were enrolled. Preterm babies received immunoprophylaxis. In all babies bacterial (through blood culture) and RSV (through *reverse transcription*-polymerase chain reaction [RT-PCR]) infections were identified. Antibiotics, corticosteroid therapy, days of respiratory assistance and length of stay in hospital were recorded.

Results: 53,6 % of newborns was RSV positive. In these babies the length of stay was higher than in those with negative RT-PCR for RSV (term babies: $7.27 \text{ d} \pm 3.40$ vs $6.02 \text{ d} \pm 3.61$ $p < 0.05$; preterm babies: $12.78 \text{ d} \pm 7.36$ vs $7.15 \text{ d} \pm 3.41$ $p < 0.05$). RSV infection rate was significantly higher in preterm babies. Patients with positive RT-PCR for RSV and negative blood culture had also less days of antibiotic therapy than those with positive blood culture ($5.26 \text{ d} \pm 3.69$ vs $7.05 \text{ d} \pm 3.64$, $p < 0.05$). There was no difference in hospitalization between patient treated with corticosteroid therapy and patients without.

Conclusions: Preterm babies are at high risk for RSV infection and immunoprophylaxis seems to be not protective. RT-PCR for RSV detection is a useful tool to limit the use of antibiotics when not necessary.