

**Conclusion:** These results suggest a significant decrease in RSVH in infants with CLD between 1998 and 2006. The reasons for this decrease need further study but may include improved NICU and outpatient management of CLD, variation of RSV severity and the use of palivizumab in this high-risk population.

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### BOCAVIRUS IN CHILDREN WITH GASTROENTERITIS

C. Lobete, A. Lobeiras, S. Suárez, J. Rodríguez, M.E. Álvarez-Argüelles, J.A. Boga

*Hospital Universitario Central de Asturias, Oviedo, Spain*

**Introduction:** Human bocavirus type I (HBoV1) is a member of the Parvoviridae family discovered in 2005. Recently, two new members have been recognized, HBoV2 and HBoV3. Its role as a pathogen in gastrointestinal diseases is not clear yet.

**Methods:** We analyzed the presence of bocavirus in the fecal samples of children belonging to a health area of approximately 40.000 children. We described the frequency of isolation of bocavirus with or without other viruses, their chronology and the clinical manifestations presented. Twenty strains were genotyped by a phylogenetic analysis of sequences obtained from a VP2 gene fragment.

**Results:** During the period from August of 2007 to January of 2010 were analyzed 1596 fecal samples, 195 (12,2%) were positive for bocavirus (51,5% in combination with other virus: adenovirus 28,1%, astrovirus 14,8%, calicivirus 10,2%, rotavirus 9,2%, CMV 0,5%). The average age was 2,4 years, the 71,9% of patients were younger than 3 years old and 56,1% of patients were boys. The higher incidence was observed in October (28,6% of fecal samples were positive for bocavirus) and November (22,4% ratio). Clinical manifestations were: diarrhea (78,1%), abdominal pain (4,1%), fever (2%), pancreatitis (1%), anemia (1%). The inpatient ratio for bocavirus was 36,2%. Sequence analysis revealed that all of the 20 strains belonged to HBoV1.

**Conclusions:** Human bocavirus is often detected and associated with epidemic character (autumn) in stools of children with diarrhea. In a half of the

cases appears coinfection with another virus. An unique genotype seems to be circulating.

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### TRENDS IN INPATIENT RSV HOSPITALIZATION (RSVH) IN YOUNG CHILDREN: AN 8-YEAR COHORT STUDY USING THE US NATIONAL HOSPITAL DISCHARGE SURVEY

J.P. Fryzek, W.J. Martone, J.R. Groothuis

*MedImmune, LLC, Gaithersburg, MD, USA*

**Aims:** Examination of national trends in RSVH in infants of varying chronologic ages over an 8-year period using the US NHDS, a multistage systematic survey of inpatient hospital use.

**Methods:** RSVH, defined by ICD-9-CM codes 079.6 (RSV), 466.11 (acute bronchiolitis due to RSV), and 480.1 (pneumonia due to RSV), was examined from 1998-2006. Infants were grouped into 3 age cohorts: < 3 months, 3-6 months, >6-24 months. Relative rates (RRs), 95% CIs, yearly hospitalization rates and yearly RSVH proportions were computed. The population estimate was derived from annual NHDS births. Trends in rates were evaluated using linear regression.

**Results:** 1,102,293 (90,000 to 147,000 per year) RSVH were identified. RSVH rates decreased nonsignificantly for all age groups from 1998-2006, however, after 2000, RSVH decreased at a faster rate (< 3 months, -3.5/1000/year; 3-6 months, -3.3/1000/year; and >6-24 months, -0.13/1000/year), with the most significant decrease ( $P=0.026$ ) for infants < 3 months. Compared with children >6-24 months, rates for RSVH were significantly higher for infants < 3 months ( $RR=7.38$ ; 95% confidence interval (CI) =7.35-7.41) and 3-6 months ( $RR=5.28$ ; 95% CI=5.26-5.29;  $P< 0.05$ ). The proportion of RSVH was 8%-12% and 6%-10% for infants < 3 months and >6-24 months, respectively. The highest proportion of RSVH occurred in infants 3-6 months (14%-23%; Chi-square  $P< 0.0001$ ).

**Conclusions:** RSVH rates in infants and young children decreased beginning in 2001. RRs were highest among the < 3 month and 3-6 month age groups. The highest proportion of RSVH was among the 3-6 month age group.

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