MORBIDITY DUE TO ACUTE LOWER RESPIRATORY INFECTIONS (ALRI) IN CHILDREN WITH BIRTH DEFECTS: A TOTAL POPULATION LINKED DATA STUDY

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Background Acute lower respiratory infections (ALRIs) remain the leading cause of hospitalisation among children < 2 years old. Birth defects occur in 5% of live births in Western Australia (WA), and are a major cause of childhood morbidity and mortality. However ALRI hospitalisation rates among children with various birth defects are unknown.

Methods We conducted a retrospective cohort study of 245,249 singleton births in WA (1996–2005). Population-based hospital morbidity data and the WA Register of Development Anomalies were linked through the Western Australian Data Linkage System to investigate ALRI hospitalisations in children with and without birth defects. We used negative binomial regression to estimate incidence rate ratios (IRR) for the association between birth defects and number of ALRI hospitalisations over the first 2 years of life, adjusting for known risk factors.

Results Overall 11% of non-Aboriginal children and 40% of Aboriginal children with birth defects had a least one ALRI admission before age 2 years. In adjusted analyses, Aboriginal and non-Aboriginal children were more likely to be hospitalised for ALRI if they had a birth defect than children with no birth defects (IRR 2.29, 95% CI: 1.89, 2.78; IRR 2.00, 95% CI: 1.84, 2.17 respectively).

Conclusions WA children < 2 years with birth defects are at greater risk of morbidity due to ALRIs, when compared to children with no birth defects. Risk of ALRI hospital admission varies between different birth defect categories.

FLEXIBLE BRONCHOSCOPY IN THE ACUTE MANAGEMENT OF CONGENITAL LOBAR EMPHYSEMA

Introduction Although uncommon, congenital lobar emphysema (CLE) is a potentially life threatening pulmonary abnormality affecting infants. Lobectomy, sometimes done under emergency conditions, is the universally accepted treatment of CLE with severe complications (resuscitation, acute kidney and liver injury, and neurological events).

Case presentation and procedure A distressed 4.5 months female infant was referred to us for repetitive prolonged bronchopneumopathy since birth. Successful chest X-rays showed increasing expansion and hypertrophy of right hemithorax, mediastinal shift, and compression of the left lung. At FB the apicoposterior segmental bronchus of the right upper lobe (APSB/RUL) was narrow, flaccid and showed an expiratory check valve obstruction. By manipulating and rotating the bronchoscope tip into APSB/RUL and applying suction, we had succeeded to release the trapped air in the RUL. Clinical and radiological manifestations resolved completely following the procedure.

Conclusions In addition to the role it might play in the diagnostic workup of patients with CLE, FFB can be used as a tool for relief of obstruction. In certain situations, this may be life saving, especially in places and settings where emergency lobectomy cannot be arranged.

AN OUTBREAK OF NEURAL TUBE DEFECTS IN IRAQ: A CASE REPORT

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Aim The aim of this study was to report an outbreak of Neural Tube Defects (NTDs) in Iraq, and to highlight the possible responsibilities of international and local authorities for an action for the control of this outbreak in this region.

Methods Information for the occurrence of NTDs was gathered from reports published from an Iraqi western region, and for other countries from reports published by the International Clearinghouse for Birth Defects and European Network for Surveillance of Congenital Anomalies.

Results Prevalence rate of NTDs was 33 (per 10,000 births, CI95%: 21–44) in Iraq while different rates have been reported from various parts of the world ranging from 12.6 (per 10,000 births) in Cuba, 9.6 (per 10,000 births) in Norway, 8.7 (per 10,000 births) in China, 7.03

Abstracts