

P243 ANXIETY AND DEPRESSION IN ADOLESCENTS AND ADULTS WITH CYSTIC FIBROSIS

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V Fainardi, E Iacinti, F Longo, M C Tripodi, G Pisi. *Center of Cystic Fibrosis, Department of Pediatrics, University Hospital of Parma, Parma, Italy*

Background Little is currently known about the anxiety and depression co-morbidities and Cystic Fibrosis (CF).

Aim To evaluate the association between anxiety and depression and long-term treatment burden in CF patients.

Subjects and Methods In 82 CF patients (36 males, age range 12–44 years, BMI range 15–29 kg/m²), anxiety and depression were assessed by the Hospital Anxiety Depression Scale (HADS). In all patients, spirometry and current therapy, such as scheduled intravenous antibiotics, chronic use of aerosolized antibiotics, insulin therapy, pancreatic enzymes and long-term oxygen therapy, were recorded.

Results A wide range of airflow obstruction was found (FEV₁ range 26–129% pred). 54, 68, 12, 85, and 11 patients underwent intravenous antibiotics, aerosolized antibiotics, insulin therapy, pancreatic enzymes and long-term oxygen therapy, respectively. 33 (40%) and 15 (18%) out of 82 patients were respectively anxious and depressive. Depression was significantly associated with intravenous antibiotics ($p < 0.01$, OR 6.0, CI 0.9 to 41) and with long-term oxygen therapy ($p < 0.01$, OR 1.4, CI 0.9 to 1.9).

Conclusions The present study shows that use of scheduled intravenous antibiotics and long-term oxygen therapy significantly affect psychological functioning profile in adolescents and adults with CF. Our results further suggest the value of psychological support in CF patients with advanced lung disease.

Acute and chronic respiratory infections

P244 RISK STRATIFICATION OF FLU IN POST-PANDEMIC WINTER 2010

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C M Orton, E Wong, P De, W McAllister. *The Royal Surrey County Hospital, Guildford, UK*

Aims The aim of the study was to review the assessment of acute medical admissions with “Flu like illness” and to identify useful tools in risk-stratifying severity of illness.

Methods This was a retrospective observational study. We reviewed the assessment of all inpatients diagnosed with “flu like illness” from November 2010 to March 2011 at a district general hospital. We evaluated potential risk-stratification tools with respect to adverse outcomes (length of admission and intensive care unit (ITU) admission): Co-morbidities (diabetes mellitus, immunosuppression, pregnancy, chronic respiratory, heart, renal and liver disease), CURB-65 score, C-reactive protein (CRP) and chest x-ray findings (CXR).

Results 27 patients were identified; 6 Male, 19 Female; mean age 40.1. 22 had virology swabs; 12 (62%) were positive for H1N1, 5 (24%) Influenza B and 2 (9%) Influenza A. Length of admission (LOA) ranged from 1 to 30 days (mean 8.3 days). Seven patients required ITU admission. 14 (52%) had no co-morbidities. Six (86%) of seven ITU patients had no co-morbidities. LOA did not differ between patients with co-morbidities and those without (10 vs 10.9 days respectively). 17 (63%) patients had CURB-65 of zero. Five (71%) of seven ITU patients had a CURB-65 of less than three. CURB-65 was poorly correlated with LOA ($R^2 = 0.22$). CRP on admission ranged from < 4 to 511 mmol/l (mean 121 mmol/l). Mean CRP of ITU patients was 240 mmol/l; in contrast to 79 mmol/l in non-ITU cases. CRP was poorly correlated with increased LOA

($R^2 = 0.16$). 25 patients had CXR on admission and 12 (48%) had abnormal findings. Patients with bilateral CXR changes had a mean LOA of 21 days compared with 3.5 days in those with normal CXR. Six (86%) of seven ITU patients had abnormal CXR.

Conclusion A raised CRP and abnormal CXR findings on admission were associated with adverse outcomes. Co-morbidities and CURB-65 correlated poorly with disease severity. These findings may be explained by the high prevalence of H1N1 influenza in winter 2010. Current Health Protection Agency guidelines place strong emphasis on CURB-65 and co-morbidities in risk-stratification. We recommend the inclusion of CRP on initial assessment and stronger emphasis on CXR changes.

P245 CAN CLINICAL, RADIOLOGICAL OR LABORATORY PARAMETERS DIFFERENTIATE H1N1 ASSOCIATED PNEUMONIA FROM COMMUNITY ACQUIRED PNEUMONIA?

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G E Hayes, C D Sheldon, B D Patel. *Royal Devon and Exeter Hospital, Exeter, UK*

Pneumonia is a recognised complication of H1N1 influenza, and is an important cause of morbidity and mortality. The Department of Health (DoH) identified characteristics that may aid identification of individuals with H1N1 pneumonia (HNP) from those with community acquired pneumonia not associated with H1N1 infection (CAP). These include severe gastrointestinal symptoms, including diarrhoea and vomiting, myalgia, fever $> 38^\circ\text{C}$, bilateral CXR changes, a low or normal total WCC, tachycardia and a CRP > 200 . Lymphopaenia is also reported as a marker of H1N1 infection. This study compared the clinical, physiological and radiological characteristics of patients with HNP with those of patients with CAP to determine if these characteristics can reliably identify those with HNP.

Methods A retrospective case notes review of all patients admitted with CAP or HNP to our institution between December 2010 and February 2011.

Results 16 patients with HNP and 52 patients with CAP were identified. Relative to patients with CAP, those with HNP were significantly younger (mean age 49 yrs ± 22.1 vs 63 yrs ± 23.2 , $p = 0.03$), were more likely to present in respiratory failure (92.3% vs 62.5%, $p = 0.05$), or with a temperature $> 38^\circ\text{C}$ (62.5% vs 34.6%, $p = 0.05$), and to report vomiting (71.4% vs 23.1%, $p = 0.02$). There was no significant difference in reported myalgia (80.0% vs 85.0%), diarrhoea (93.8% vs 79.2%). There was no significant difference in the prevalence of unilateral multilobar consolidation (HNP 25.0% vs CAP 17.3%) or bilateral consolidation (31.3% vs 21.5%). Laboratory results showed no significant difference in lymphocyte count (HNP 0.84 ± 0.47 vs CAP 0.95 ± 0.53), CRP (234.3 ± 204 vs 209.0 ± 129) or neutrophil count (9.5 ± 4.8 vs 12.5 ± 7.5).

Conclusions The features stated in the DoH guidelines do not reliably allow clinical differentiation between HNP and CAP. The presence of vomiting, younger age and high fever are suggestive, but not diagnostic, of HNP and viral PCR remains the gold standard diagnostic tool.

P246 AIRWAY AND SYSTEMIC INFLAMMATION IN STABLE AND EXACERBATED BRONCHIECTASIS: A PILOT STUDY

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R Chitkara, H Batchelor, R J Sapsford, S Workman, A R C Patel, A J Mackay, B Grimbacher, J R Hurst. *UCL Medical School, London, UK*

Introduction It is not known whether systemic inflammation reflects lower airway inflammation in non-CF bronchiectasis. If confirmed,