

**P249 ASSESSMENT OF HEALTH RELATED QUALITY OF LIFE (HRQOL) IN NON-CYSTIC FIBROSIS BRONCHIECTASIS USING A NEW DISEASE-SPECIFIC TOOL FOR MEASURING HRQOL: THE QUALITY OF LIFE-BRONCHIECTASIS (QOL-B) QUESTIONNAIRE**

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**Introduction** The QOL-B is the first disease-specific HRQoL questionnaire for bronchiectasis. Quittner *et al* (ATS, 2009) have provided preliminary data on reliability and validity of the questionnaire. It has not been used in bronchiectasis populations outside of the USA.

**Aim** To assess HRQoL using the disease-specific QOL-B questionnaire and explore the relationship between FEV<sub>1</sub>% predicted, age, gender, time from 1st *Pseudomonas aeruginosa* isolate and QOL-B.

**Methods** This study is part of a larger study exploring adherence to treatment in bronchiectasis. Patients with bronchiectasis (confirmed by HRCT) were recruited if they had a positive sputum culture for *P aeruginosa* and were using nebulised antibiotics. Patients self-completed the QOL-B (eight domains, each scored 0–100, low-high HRQoL). Spirometry was performed according to ATS/ERS guidelines. Stepwise multiple regression analyses were completed for each QOL-B domain using four independent variables: age, gender, FEV<sub>1</sub>% and time from 1st *P aeruginosa* isolate.

**Results** 71 patients were recruited: 22M/49F; mean (SD) age 65 (8) yrs; FEV<sub>1</sub> 60 (25) % predicted; mean time since first *P aeruginosa* isolate 51 (41) months. QOL-B domains showed impairment in HRQoL, mean (range): physical functioning 31 (0–100); vitality 37 (0–78); health perceptions 39 (8–92); social functioning 42 (0–100); role functioning 46 (0–100); respiratory functioning 53 (8–100); treatment burden 56 (11–89); and emotional functioning 73 (8–100). Males had significantly lower ( $p=0.046$ ) physical functioning than females, mean (SD) 22.8 (23) vs 36.58 (27) respectively; however gender did not explain the variance in any of the QOL-B domains. Age, FEV<sub>1</sub>% and time from 1st *P aeruginosa* isolate together explained 5.5–26.9% of variance ( $r^2$ ) in domain scores. Age was related to health perceptions ( $r^2=12.1\%$ ), treatment burden ( $r^2=11.5\%$ ), social ( $r^2=15.6\%$ ), role ( $r^2=10.7\%$ ) and respiratory ( $r^2=16\%$ ) functioning domains. FEV<sub>1</sub>% was related to physical ( $r^2=18.8\%$ ) and role ( $r^2=8.7\%$ ) functioning domains. Time from 1st *P aeruginosa* isolate was related to vitality ( $r^2=11\%$ ), physical ( $r^2=6.9\%$ ), social ( $r^2=5.6\%$ ) and emotional ( $r^2=5.5\%$ ) functioning domains.

**Conclusion** HRQoL is impaired in patients with bronchiectasis. Older age is associated with better HRQoL. Higher FEV<sub>1</sub>% is associated with better physical and role functioning. Vitality, physical, social and emotional functioning improves with increased time from 1st *P aeruginosa* isolate.

**P250 MYCOPLASMA PNEUMONIA. PRESENTING FEATURES AND DIAGNOSIS IN OUR DISTRICT GENERAL HOSPITAL IN 2010**

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**Introduction** *Mycoplasma pneumoniae* is a common cause of pneumonia. Incidence ranges from 0.5 to 5.0 per 1000 population or up to 20% of all pneumonias, and generally declines with age, being rare in

adults over 50. Classically epidemics occur in 4 to 7-year cycles. Usual features are insidious onset “viral”-type symptoms, including fever, headache, dyspnoea and dry cough, together with a variety of extra pulmonary manifestations. Diagnosis is often missed because of the atypical and unusual presentation.

**Methods and Results** We examined electronic records of patients during 2010 diagnosed with *M pneumoniae* by an elevated specific IgM immunoassay method. There were 35 cases. Of those, 20 required acute admission to our hospital (18 adults and two children). In adults, common presenting features were fever, cough, headaches, lethargy and myalgia. Major presenting features, however, were meningitis/encephalitis in two patients, Stevens-Johnson syndrome in 1, confusion in 1, and haemoptysis in 1. In six adults (33%), the diagnosis was not made during hospital admission, and symptoms were erroneously attributed to presumptive diagnoses of viral meningitis, acute viral illness, dyspnoea of unknown cause, asthma/pericarditis, and an acute drug reaction. We compared length of admission in patients diagnosed early on in admission to those misdiagnosed or diagnosed late; early diagnosis of *M pneumoniae* using this method was associated with significantly shorter lengths of stay.

**Conclusion and Discussion** An appreciation of common presenting clinical features of *Mycoplasma* is important in ensuring the diagnosis is made promptly and not missed. The advantage of an IgM based assay is the detection of early/acute illness rather than convalescent disease (as in the case of parallel assays of acute and convalescent samples), having the potential to change management, refine antibiotics where appropriate and also to potentiate early discharge.

**P251 JUNIOR DOCTORS' INTERPRETATION OF CXRS IS MORE CONSISTENT THAN CONSULTANTS IN THE CONTEXT OF POSSIBLE PNEUMONIA**

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**Introduction and Objectives** BTS guidelines suggest the diagnostic test for pneumonia (in hospital) is a CXR. Since management should be commenced within 4 h of arrival the initial interpretation of the CXR is most often performed by junior doctors. Consultants review patients and their CXRs within 24 h of admission and a radiologist's report is issued at a later time point but diagnosis dependent decisions—whether to admit, risk stratification and whether to give antibiotics—fall to junior doctors. We measured the inter-observer agreement within groups of doctors involved at key points in CAP diagnosis and management.

**Methods** 24 admission CXRs from patients attending a large teaching hospital between February and April 2011 with a suspected diagnosis of CAP were collected on a radiology computer workstation. Eleven reporting radiologists, eight attending consultants and twenty-two junior doctors from a range of acute medical specialties were recruited. All 41 recruits independently interpreted the CXRs, answering “yes” or “no” for presence of pneumonic infiltrate. Agreement within groups was tested using the Fleiss-Cuzick extension of Cohen's  $\kappa$  statistic (abbreviated here as  $\kappa$ ).

**Results** Agreement ( $\kappa$  scores) for each group of doctors are shown in Abstract P251 figure 1. Radiologists had moderate agreement ( $\kappa$  0.52, CI 0.49 to 0.55), junior doctors had moderate agreement ( $\kappa$  0.47, CI 0.45 to 0.48) and attending consultants fair agreement ( $\kappa$  0.34, CI 0.30 to 0.38).