JOURNAL CLUB SUMMARIES

What's hot that the other lot got

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LUMACAFTOR–IVACAFTOR IN PATIENTS WITH CYSTIC FIBROSIS HOMOZYGOUS FOR PHE508DEL CFTR

It's 5 years since Ramsey *et al*'s landmark paper demonstrating Ivacaftors's ability to significantly change lung function in cystic fibrosis (CF) patients with the G551D mutation. The search is now on for a similar finding for the most common mutation—F508del. Although not as dramatic, Wainwright *et al* (*N Engl J Med* 2015;373:220–31) have shown that combining a CF transmembrane conductance regulator (CFTR) corrector—Lumacafor—and a CFTR potentiator—Ivacaftor—does produce a significant improvement in FEV_1.

SECONDHAND SMOKE EXPOSURE AND ILLNESS SEVERITY AMONG CHILDREN HOSPITALISED WITH PNEUMONIA

The ban on smoking in a car carrying children will become UK law in October 2015; it is already law in some US states. Ahn *et al* (*J Paeds* 2015; http://dx.doi.org/10.1016/j.jpeds.2015.06.049) add to the mounting evidence of the effect of secondhand smoke on children with their study of 2219 children admitted with pneumonia in Tennessee and Utah between 2010 and 2012. Children with ≥2 smokers in their household were more likely to go to an intensive therapy unit (25.2% vs 20.9%; adjusted OR 1.44; 95% CI 1.05 to 1.96) and have a longer stay in hospital (median 70.4 h vs 64.4 h; adjusted HR 0.85; 95% CI 0.75 to 0.97). Results were adjusted for educational level, government insurance, age, sex, race, comorbidities, enrolment site, year and season.

MICROSCOPIC POLYANGIITIS ASSOCIATED WITH PULMONARY FIBROSIS

Diffuse alveolar haemorrhage (DAH) is the textbook pulmonary manifestation of microscopic polyangiitis (MPA). However, pulmonary fibrosis is increasingly being described. Casarers *et al* (*Clin Rheum* 2015;34:1273–7) have conducted a retrospective case review of all MPA patients in Buenos Aires over a 15-year period. They found 9/28 patients (32%) had pulmonary fibrosis on high-resolution CT, 7/9 of which had the usual interstitial pneumonia pattern; 11/28 (39%) patients had DAH. Patients with pulmonary fibrosis were more likely to be smokers and have DAH, but less likely to have renal involvement. Pulmonary fibrosis preceded any other organ involvement in five patients.

LONG-TERM EXPERIENCE WITH RITUXIMAB IN ANTI-SYNTHETASE SYNDROME-RELATED INTERSTITIAL LUNG DISEASE

Anti-synthetase syndrome (ASS) is associated most commonly with a non-specific interstitial pneumonia pattern of interstitial lung disease (ILD) and is usually treated with steroids and/or cyclophosphamide. Andersson *et al* (*Rheumatology* 2015;54:1420–8) have prospectively evaluated the use of rituximab in their cohort of ASS patients with severe ILD at Oslo University Hospital. Twenty-four patients had severe ILD, received rituximab and had ≥12 months follow-up; in these patients the median percentage of predicted FVC, FEV_1 and diffusing capacity of the lungs for carbon monoxide (DLCO) increased by 24%, 22% and 17%, respectively. The greatest improvements were seen in patients with recent- or acute-onset ILD. Mortality was 21% in 12 months, and 6/7 of those deaths were infection related; however, mortality in ASS patients without severe ILD was 32%.

BEYOND: FIRST-LINE CARBOPLATIN/PACLITAXEL PLUS BEVACIZUMAB OR PLACEBO IN CHINESE PATIENTS WITH ADVANCED OR RECURRENT NON-SQUAMOUS NON-SMALL-CELL LUNG CANCER

Zhou *et al* have performed a randomised, double-blind, multicentre, placebo-controlled, phase III study of first-line bevacizumab plus carboplatin/paclitaxel (B+CP) versus placebo plus carboplatin/paclitaxel (Pl+CP) in China where the epidermal growth factor receptor (EGFR) prevalence is 30%. Progression-free survival (PFS) was significantly prolonged in the B+CP arm compared with Pl+CP: 9.2 months (95% CI 8.4 to 10.7) vs 6.5 months (95% CI 5.8 to 7.1), respectively. In the EGFR-positive group, the median PFS was 12.4 months with B+CP and 7.9 months with Pl+CP (HR 0.27; 95% CI 0.12 to 0.63); PFS was 8.3 and 5.6 months (HR 0.33; 95% CI 0.21 to 0.53) in wild-type tumours.

RELIABLE EGFR MUTATION TESTING IN ULTRASOUND-GUIDED SUPRACLAVICULAR LYMPH NODE FINE-NEEDLE ASPIRATES

'Not enough tissue for EGFR testing' is a phrase commonly heard in lung cancer multidisciplinary team meetings. Awwad *et al* have retrospectively assessed all ultrasound (US)-guided fine needle aspiration (FNA) of neck node procedures performed in Nottingham University Hospital from 2001 to 2013. The procedures were carried out by a radiologist with a 21-gauge needle; the average short axis of sampled nodes was 12.9 mm and 41% of nodes were <10 mm. A total of 228 patients underwent FNA, and 57 were adenocarcinoma; 34 were tested for EGFR (EGFR testing was not routine at that time), and 29 (80%) of those samples were sufficient. The authors conclude that US-guided neck FNA is a reliable procedure for diagnosis of lung cancer including EGFR mutation testing.

COCHRANE NEWSFLASH

Chacko B, Peter JV, Tharyan P, *et al*. Pressure-controlled versus volume-controlled ventilation for acute respiratory failure due to acute lung injury (ALI) or acute respiratory distress syndrome (ARDS). *Cochrane Database Syst Rev* 2015;(1):CD008807. doi: 10.1002/14651858.CD008807.pub2.

Available evidence is insufficient to confirm whether pressure-controlled ventilation (PCV) offers any advantage over volume-controlled ventilation (VCV) in improving outcomes for people with ALI on ventilator machines. More studies including a larger number of people given PCV and VCV may provide reliable evidence on which more firm conclusions can be based.

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