

JOURNAL CLUB SUMMARIES

# What's hot that the other lot got

Benjamin Soar

#### TALC PLEURODESIS IMPROVES SURVIVAL OF PATIENTS WITH MALIGNANT PLEURAL EFFUSIONS

This Croatian retrospective case control study compared patients who had undergone talc pleurodesis with a control group of matched patients who were treated with serial thoracentesis.1 One hundred and seven patients with proven malignant pleural effusions (metastatic breast and lung cancer) were included. Fifty-six were treated with talc pleurodesis and a control group of 51 patients matched in age, sex and disease underwent serial thoracentesis. The overall and subgroup survival with different tumour types and different performance status (PS) 1, 2 and 3 were compared. Patients undergoing talc pleurodesis had a longer average survival interval (MS) than the patients who underwent thoracentesis (MS 21.5 and MS 9 weeks respectively, p<0.001). The best results were observed in those with PS 1 (MS 35.5 and MS 11 weeks) and PS 2 (MS 21 and MS 10 weeks). There was no difference in groups at PS 3. The authors conclude that patients treated with talc pleurodesis had a significantly longer survival than patients treated with thoracentesis only. They feel this suggests a possible antitumour effect in addition to improvement in symptoms that had previously been thought to be the main benefit of talc pleurodesis.

## ABNORMAL LIVER FUNCTION TESTS IN CYSTIC FIBROSIS

β-lactam antibiotic related liver enzyme derangement can limit treatment options for infective exacerbation of cystic fibrosis (CF) bronchiectasis. This Australian study<sup>2</sup> aimed to identify risk factors for elevated liver function tests (LFTs) in patients with CF receiving parenteral antibiotics. All patients attending the Prince Charles Hospital Adult CF Centre in 2012 were identified using the CF research database and CF data registry. Each patient's biochemistry results were reviewed and

Correspondence to Benjamin Soar, Respiratory Centre, Royal Cornwall Hospital, Truro, Cornwall TR1 3LJ, UK; bensoar@doctors.org.uk patients with LFTs of more than three times the normal limit were identified. For each laboratory test, concurrent antibiotic use was reviewed. Abnormal LFTs were evident in significantly more patients receiving intravenous antibiotics than those who did not (43% vs 18%, p<0.001). Pre-existing CF-related liver disease and total intravenous antibiotic treatment days were not associated with abnormal LFTs. Male sex, poorer lung function and lower leucocyte counts were associated with abnormal LFT. However, these variables only explained 4.2% of the variance in the multivariable logistic model. The authors concluded that elevated LFTs are common during intravenous antibiotic treatment in CF; however, antibiotic-induced liver injury is largely idiosyncratic and unpredictable.

### RAISED PROSTATE-SPECIFIC ANTIGEN LEVELS IN COPD

Prostate-specific antigen (PSA) is a commonly used biomarker in the diagnosis and management of prostate cancer. It has been established that PSA levels can be raised in ischaemia and hypoxia (shock, cardiac surgery). This Turkish study<sup>3</sup> investigated the impact of hypoxia on serum total PSA (tPSA) and free PSA (fPSA) levels in patients with COPD. Ninety-five patients hospitalised for exacerbation of COPD were compared with 80 matched controls. Serum tPSA and fPSA levels and f/tPSS ratios were determined in all patients on the first day of hospitalisation (exacerbation) and 7 days after completion of treatment (stable state). Statistical analysis included paired t test and Mann-Whitney U test. The levels of tPSA and fPSA during exacerbations of COPD were significantly higher than the levels of the stable period (7.12 vs 1.08 and 2.91 vs 0.73 respectively, p<0.01). Stable state COPD matched well with control PSA values. The ratio was the same in exacerbation and stable state (0.41 vs 0.40). The authors conclude that hypoxaemia during exacerbation of COPD can cause a rise in PSA levels but the ratio is unaffected. They suggest interpreting PSA results

during an acute exacerbation of COPD with caution.

## EFFECTS OF SHORT-TERM ORAL CORTICOSTEROID INTAKE ON DIETARY INTAKE AND BODY WEIGHT IN ASTHMA

Has a patient with asthma ever turned down a course of steroids for fear of becoming obese? Well this Australian study should add weight (excuse the pun) to your argument to convince them otherwise. The study investigated whether a 10-day course of oral corticosteroid (OCS) therapy in adults with asthma changed appetite, dietary intake, body weight and body composition compared with placebo.4 The study was a double-blinded, placebocontrolled randomised crossover trial of 10 days of prednisolone (50 mg) in adults with stable asthma. Subject adherence was confirmed by significant decrease in blood eosinophils following prednisolone compared with placebo. There was no difference in appetite measured by visual analogue scale (p=0.267), dietary intake (kJ/day) (p=0.431), body weight (p=0.083), or body fat (p=0.230) in the prednisolone group compared with placebo. Symptoms including sleep disturbance and GI upset were reported significantly more in the prednisolone group. The authors conclude that short-term OCS in stable asthma does not induce significant changes in appetite, dietary intake, body weight or composition and that this may assist in increasing adherence.

**Competing interests** None declared.

**Provenance and peer review** Commissioned; internally peer reviewed.



To cite Soar B. Thorax 2015;70:710.

*Thorax* 2015;**70**:710. doi:10.1136/thoraxjnl-2015-207285

### **REFERENCES**

- 1 Wien Klin Wochenschr. Apr 2015.
- 2 Jong T, Geake J, Yerkovich S, Bell SC. Idiosyncratic reactions are the most common cause of abnormal liver function tests in patients with cystic fibrosis. *Intern Med J* 2015;45:395–401.
- 3 Ozge C, Bozlu M, Ozgur ES, Tek M, Muslu N, Ilvan A. The impact of hypoxemia on serum total and free prostate-specific antigen levels in patients with chronic obstructive pulmonary disease. *Med Oncol* 2015;32:156.
- 4 Berthon BS, Gibson PG, McElduff P, MacDonald-Wicks LK, Wood LG. Effects of short-term oral corticosteroid intake on dietary intake, body weight and body composition in adults with asthma – a randomized controlled trial. Clin Exp Allergy 2015;45:908–19.

