JOURNAL CLUB SUMMARIES

What's hot the other lot got

WOULDN'T IT BE USEFUL?

We are now testing for EGFR mutations in order to aid the oncological treatment of lung cancer. This sometimes involves a need to obtain further tissue in order to test for the EGFR mutation. In this paper from Amsterdam the authors describe testing sputum for the EGFR mutation (*Lung Cancer* 2013;82:38–43). Sputum was tested in 10 patients with EGFR positive proven lung cancer and 10 patients with COPD, using DNA PCR. EGFR mutations were seen in 30–50% of the sputum samples of those with EGFR mutations.

ANTI-INFLAMMATORIES OR ANTIBIOTICS FOR DISCOLOURED SPUTUM IN ACUTE BRONCHITIS?

In this trial patients presenting with at least one respiratory tract symptom and cough with discoloured sputum as the predominant feature were randomised to receive 10 days of either ibuprofen 600 mg three time a day, amoxicillin-clavulanic acid 500/125 mg three time a day or placebo. The duration of the symptoms was assessed by diary card. The outcome was number of days until cough resolution. There were a slightly lower median number of days with cough in those treated with ibuprofen (9) versus amoxicillin-clavulanic acid (11) versus placebo (11). However this was not statistically significant. Adverse events were more common in the antibiotic arm (*BMJ* 2013;347:f5762).

WHAT ARE THE HEALTH RELATED QUALITY OF LIFE SCORES IN ICU SURVIVORS WITH COPD?

In this Swedish study 51 patients with COPD who had an ICU stay of more than 24 h were followed by questionnaires at 6 months, 12 months and 24 months (*Critical Care* 2013;17:R236. doi:10.1186/cc13059). Their results were compared with an age-adjusted and sex-adjusted reference population and a reference group with COPD. The health related quality of life scores at 6 months were lower than the reference group, however there were no significant differences between the ICU group and the reference COPD group at 24 months.

INTRAVENOUS OR NEBULISED MAGNESIUM FOR ACUTE SEVERE ASTHMA?

In this double-blind placebo-controlled trial participants were all given standard therapy with intravenous magnesium 2 g or nebulised magnesium (3×500 mg in 1 hour) or placebo (*Emerg Med J* 2013;30:866. doi:10.1136/emermed-2013–203113.1). The outcome measures were those admitted to hospital for 7 days and breathlessness measured on a 100 mm VAS score. There was no decrease in admission to hospital between the groups. There was a slight decrease in the VAS score in the intravenous magnesium group though not in the nebulised magnesium group, indicating that there is no role for nebulised magnesium in acute severe asthma.

ARE WE SEEING MORE ADMISSIONS TO CRITICAL CARE WITH ASTHMA?

This study looked retrospectively at all asthma admissions to critical care for the past 10 years using the national audit database (*BMJ Open* 2013;3:e003420. doi:10.1136/bmjopen-2013–003420). During that time 1.4% of all admissions were for asthma, these being mainly female 67.5%. Of those admitted 46.2% needed to be ventilated. The median length of stay was 1.8 days. There were 539 deaths in critical care with 93.3% surviving to discharge. The numbers being admitted each year increased by an average of 4.7%. This could be due to a true increase in asthma prevalence or severity, or a change in admission criteria though this study was unable to ascertain this.

DOES STRESS ULCER PROPHYLAXIS INCREASE THE RISK OF NOSOCOMIAL PNEUMONIA IN CARDIAC SURGICAL PATIENTS?

This study looks at a cohort of cardiac bypass surgery patients who were commenced on a proton pump inhibitor or a H2 receptor antagonist post surgery (*BMJ* 2013;347:f5416). The risk of pneumonia was then ascertained. Of those treated with a proton pump inhibitor 5% developed postoperative pneumonia compared with 4.3% who received a H2 antagonist. After propensity scoring was carried out there was an increased risk of pneumonia with proton pump inhibitors (risk ratio 1.11, CI 1.02 to 1.20). There was no statistical difference in the rate of gastrointestinal bleeding for those who were on a proton pump inhibitor or H2 antagonist.

WHAT IS THE RISK OF SUICIDE WITH SMOKING CESSATION MEDICATION?

The records of 119 546 patients who had used smoking cessation therapy were studied to see if they had an episode of self harm, suicide or depression within 3 months of commencing the smoking cessation therapy (*BMJ* 2013;347:f5704). There were 92 cases of self harm and 1094 of depression. After carrying out Cox regression analysis there was significant increase in self harm or depression in those taking varenicline or bupropion compared with those using nicotine replacement therapy.

Correspondence to Kathryn Prior, StR Specialty Trainee, Respiratory and General Internal Medicine, Chest Clinic, Plymouth Hospitals NHS Trust, Derriford Road, Crownhill, Plymouth, Devon, PL6 8DH, UK.

Competing interests None.

Provenance and peer review Not commissioned; internally peer reviewed.

To cite *Thorax* 2014;**69**:102.

Thorax 2014;**69**:102.
doi:10.1136/thoraxjnl-2013-204765