

JOURNAL CLUB SUMMARIES

What's hot that the other lot got

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WHICH CAME FIRST, INTERSTITIAL PNEUMONIA OR COLLAGEN VASCULAR DISEASE?

The group looked at 111 records retrospectively of patients who had been diagnosed with interstitial pneumonia (IPF) from 1990 to 2007 (PLoS ONE 9:e94775). Ten of these patients subsequently were diagnosed with collagen vascular disease (CVD), being rheumatoid arthritis (4), microscopic polyangitis (4), systemic sclerosis (1) and systemic sclerosis and Sjorgeren's syndrome (1). The average time to the diagnosis of CVD was 3.9 ±2.4 years. None of the patients had any CVD-positive autoantibodies at the time of diagnosis, though half had a positive antinuclear antibody (ANA). The presenting features were analysed to see what factors predicted the development of IPF. These were being significantly younger and female. Cox regression analysis showed being female and having the presence of lymphoid aggregates with germinal centres on biopsy were significantly associated with the occurrence of CVD in patients initially diagnosed with IPF.

OTHER WAYS OF TREATING VOCAL CORD DYSFUNCTION

Vocal cord dysfunction can be difficult to treat. This paper from Australia (Respirology 2014;19:531-7) describes a series of 11 patients who had a total of 24 injections of botulinum toxin to a unilateral vocal cord. All had asthma resistant to treatment and abnormal vocal cord dysfunction. On assessment, Asthma Control Test Scores improved overall (9.1 ± 2.4) before and 13.5 ± 4.5 after treatment; difference 4.4±4.2; p<0.001). There was an improvement in airway size on CT of the larynx. Spirometry was not altered. One patient experienced an asthma exacerbation. The side effects were moderate, being dysphonia and dysphagia. The authors suggest that a larger trial is warranted.

CAN SOLITARY METASTASECTOMY BE CARRIED OUT FOR LUNG CANCER?

A total of 99 patients at a single centre from 1997 to 2009 underwent complete solitary

Correspondence to Dr Kathryn Prior, General Internal Medicine, Heart and Lung Unit, South Devon Healthcare NHS Foundation Trust, Torbay Hospital, Lowes Bridge, Torquay TQ2 7AA, UK; Kathrynbrain@doctors.net.uk synchronous Non Small Cell Lung Cancer (NSCLC) metastasis resection, these being both intrapulmonary and extra pulmonary (http://dx.doi.org/10.1016/j.athoracsur.2014. 03.028). Only those who were treated with curative intent were included in the reterospective analysis. The overall 5-year survival rate was 38%. A significantly longer survival was observed in patients without mediastinal (N2 or N3) lymph node involvement (median, 50 months) compared with patients who had mediastinal lymph node metastases (median, 19 months survival; p=0.015). In patients with a solitary metastasis in the ipsilateral or contralateral lung, there was a 5-year survival rate of 48.5%. In those with extra pulmonary metastases, the survival rate was lower, being 23.6% (p=0.006).

DOES PRETERM BIRTH LEAD TO ASTHMA AND WHEEZING IN CHILDHOOD?

This large study looked at 31 birth cohorts compised of 147 000 children, to answer the question regarding preterm birth and the risk of asthma (J Allergy Clin Immunol 2014;133:1317-29). They carried out a one-stage meta-analysis to ask if preterm birth (<37 weeks) and low birth weight (<2500 g) are associated with school-age asthma and or preschool wheezing. They found that the greatest risk of school-age asthma is in those who are born preterm, and have the high infant weight gain (OR, 4.47; 95% CI 2.58 to 7.76). Preterm birth was associated with school-age asthma independently from weight (pOR, 1.40; 95% CI 1.18 to 1.67). This was also replicated for preschool wheezing.

SHOULD 'STOP SMOKING' PROGRAMMES TARGET COUPLES?

This US population study says yes, as couples have similar health behaviours. It looked at the odds of quitting smoking for both men and women with a partner who is a current smoker, former smoker or never smoker (*Am J Epidemiol* 2014;179:1182–7). They analysed 4500 pairs aged 45–65 years from the Atherosclerosis Risk in Communities cohort Study who were recruited in 1986–1989 and followed for 9 years. Logistic regression with generalising estimating equations were used

to calculate odds ratios of quitting smoking for those who have a current or former smoker as a spouse compared to those whose partner has never smoked. Being married to a current smoker decreased the odds of quitting for both men and women (for men, OR=0.37, 95% CI 0.29 to 0.46; for women, OR=0.54, 95% CI 0.43 to 0.68). Being married to a former smoker increased the odds of quitting for women only (OR=1.26, 95% CI 1.04 to 1.53).

A META-ANALYSIS FOR ASTHMA

This meta-analysis aimed to determine the comparative effectiveness and safety of all maintenance treatments for chronic asthma, as well as their ability to reduce defined exacerbations (BMJ 2014;348:g3009). They looked at 64 papers describing 66 trials of at least 6 months in duration; 57 trials were analysed for severe exacerbations. A total of 16 interventions were analysed. Low-dose corticosteroids were superior to all other single-agent interventions in preventing severe exacerbations, the rate ratio for placebo compared with low-dose inhaled corticosteroids was 4.19 (95% credible interval 2.87 to 6.16). The superior treatment compared to low-dose inhaled corticosteroid was combined maintenance and reliever treatment, or combined fixed dose treatment with rate ratios of 0.44 (0.29 to 0.66) for combined maintenance and reliever treatment and 0.51 (0.35 to 0.77) for combined fixed dose treatment. Overall, combined treatment outperformed single-agent treatment.

THEOPHYLLINE FOR COUGH

Theophylline is commonly used in the respiratory clinic. There is research showing that is has antitussive qualities. This trial aimed to look at the mechanism of action (I Allergy Clin Immunol 2014;133:1588-98). It looked at how theophylline affected the vagal sensory nerve in both humans and guinea pigs. It also looked at the guinea pig cough reflex in vitro and in vivo. It showed that theophylline was effective at inhibiting a variety of tussive stimuli. Theophylline acts by decreasing the excitability of sensory nerves by increasing the open probability of small conductance calcium-activated potassium channels. Could this lead to potential new treatments for cough?



To cite Prior K. *Thorax* 2014;**69**:786. *Thorax* 2014;**69**:786. doi:10.1136/thoraxjnl-2014-205870