What's hot that the other lot got

Ryan Robinson

of recurrence in female patients may be due to underlying gender-specific pathophysiology such as lymphangioliomyomatosis and catamenial pneumothoraces.

VISUAL SCORING FOR CORONARY ARTERY DISEASE IN COPD

Cardiovascular disease is a common cause of morbidity and mortality in patients with COPD and is frequently under diagnosed and under treated in this patient group due to the substantial overlap in symptomatology. CT coronary angiography is a commonly used non-invasive method of assessing coronary artery calcification (CAC), a surrogate for the presence of cardiovascular disease. Often CAC is noted incidentally on a non-gated CT chest performed in patients with COPD. The Agatston score, a semi-automated scoring system, is a well-established method of assessing CAC used predominantly on CT coronary angiography. The cohort study by Bhatt *et al* (*Chest* 2018;154(3):579–587) examines the use of this and a visual alternative, the Weston score, to assess CAC in non-gated CT scans performed in patients with COPD. About 1875 patients were included. And 413 (22.0%) had significant CAC according to Weston scoring and 241 (12.9%) using the Agatston score, with significant correlation between the two (Spearman $r=0.84$, $p\leq 0.001$). The diagnostic performance of the two scoring systems was similar in both those with and without COPD. Patients with COPD were significantly more likely to have undiagnosed CAD identified than controls. After adjustment for demographic characteristics, a high Weston score was associated with a shorter time to first coronary event (adjusted HR 2.16, 95% CI 1.32 to 3.53, $p=0.002$), but high Agatston scores were not (HR 1.75, 95% CI 0.99 to 3.09, $p=0.053$). The authors note that Weston scores were performed by experienced radiologists limiting their generalisability. However, these data suggest that there is benefit in using readily available CT scans to predict cardiovascular disease in patients with COPD, allowing optimisation of therapy with the aim of mitigating risk.

Competing interests None declared.

Patient consent Not required.

Provenance and peer review Commissioned; internally peer reviewed.

© Author(s) (or their employer(s)) 2018. No commercial re-use. See rights and permissions. Published by BMJ.

To cite Robinson R. *Thorax* 2018;73:1194.

Thorax 2018;73:1194.
doi:10.1136/thoraxjnl-2018-212730

ANTIREFLUX SURGERY IN IDIOPATHIC PULMONARY FIBROSIS

Non-randomised data have demonstrated high prevalence of gastro-oesophageal reflux disease (GORD) in patients with idiopathic pulmonary fibrosis (IPF) and postulated a potential role in disease progression. However, interventional studies examining medical treatment of GORD in patients with IPF have had mixed outcomes. Raghu *et al* (*Lancet Resp Med* 2018;6:707–714) performed a randomised controlled trial examining the rate of decline in FVC after laparoscopic antireflux surgery in patients with IPF with significant GORD demonstrated on pH manometry. About 58 patients were randomised 1:1 to either antireflux surgery or the non-surgery group. Change in FVC was monitored over a 48-week period postrandomisation. Surgery was effective in normalising reflux. Although numerically lower, there was no significant difference in rate of decline in FVC in the surgical group (-0.05 L (95% CI -0.15 to 0.05)) when compared with the non-surgical group (-0.13 L (-0.23 to -0.02)) ($p=0.28$). Again the secondary outcomes showed no significant difference in the rate of acute exacerbation, respiratory-related hospitalisation or death between the two groups, although with trends towards favouring surgical intervention. There were few serious adverse events in the surgical group. This study establishes antireflux surgery as safe in patients with IPF and confirmed GORD, however, larger studies are required to assess whether there is therapeutic value in slowing progression of IPF or reducing morbidity associated with exacerbations.

HIGHER DOSE RIFAMPICIN IN TB

The 6-month duration four drug regime has been the standard of TB treatment for many years. Attempts to shorten therapy length previously with higher drug doses have been unsuccessful mainly due to apparent drug toxicity. The randomised controlled trial by Velásquez *et al* (*Am J Respir Crit Care Med* 2018;198(5):657–666) compares the efficacy of three oral doses of rifampicin (10, 15 and 20 mg/kg) during the 8-week intensive treatment phase at changing the rate of elimination of *Mycobacterium tuberculosis* in sputum. The frequency of grade

two rifampicin-related adverse effects was also investigated. About 180 patients were randomised to receive a study drug, with 60 in each dose arm. The results reached significance in the per protocol analysis with a reduction in log10 colony forming units/mL/day (CFU/mL/day) mean change -0.022 (95% CI -0.046 to 0.002 , $p=0.022$) per 5 mg increase in rifampicin dose. In the modified intention to treat analysis, each dose increment resulted in a mean change of -0.011 (95% CI -0.025 to 0.025 , $p=0.230$) log10 CFU/mL/day. The authors speculate that this may have missed significance due to the temporary halting of higher rifampicin doses (with subsequent reduction to normal dosing) while potential adverse outcomes were being investigated. The frequency of grade 2 adverse effects remained similar in all dosing regimens although total serious adverse events during the study period was non-significantly higher in the maximum rifampicin dose group. The authors suggest that the current data do not support the use of 20 mg/kg rifampicin to shorten treatment regimens but suggests that even higher doses deserve future investigation.

RATES OF PNEUMOTHORAX RECURRENCE

Reported rates of recurrence in primary spontaneous pneumothorax (PSP) are variable making future management of this common disorder difficult to predict. This comprehensive meta-analysis by Walker *et al* (*Eur Respir J* 2018; 6;52(3)) of 29 studies (4 of which were randomised controlled trials) involving 13 548 patients, investigates the 1 year and overall recurrence in patients presenting with a medically managed first presentation of PSP. Factors associated with recurrence were also examined. The 1 year recurrence rate was 29.0% (95% CI 20.9% to 37.0%) with an overall recurrence (ipsilateral or contralateral) rate of 32.1% (95% CI 27.0% to 37.2%). Female sex was associated with increased recurrence, with an OR of 3.0 (95% CI 1.24 to 7.41). Although low body mass index could be shown to be a risk factor for recurrence, differing cut-offs used in the study prevented pool analysis. Importantly, as a modifiable risk factor, smoking cessation was associated with fourfold decrease in risk, OR 0.26 (95% CI 0.10 to 0.63). The majority of patients with PSP who will have further pneumothoraces will do so in the first year. The authors suggest higher levels

Respiratory department, Wirral University Teaching Hospital, Wirral CH49 5PE, UK

Correspondence to Dr Ryan Robinson, Wirral University Teaching Hospital, Wirral CH49 5PE, UK; ryan.robinson2@nhs.net