JOURNAL CLUB SUMMARIES

What’s hot that the other lot got

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CPAP FOR THE OVER 65s WITH OBSTRUCTIVE SLEEP APNOEA SYNDROME

Continuous positive airway pressure (CPAP) use for middle-aged patients with symptomatic moderate-severe obstructive sleep apnoea (OSA) has a clear evidence base showing patient benefit and cost-effectiveness. Despite many clinicians using CPAP in older patients, specific evidence for this practice is limited. McMillan et al (Lancet Respir Med 2014; pii: S2213-2600 (14)70172-9) have reported the results of the PREDICT trial (CPAP in older people with OSA syndrome). This UK trial involved 14 recruiting sites, where consecutive patients aged 65 years or above with an Oxygen Desaturation Index of >7.5/h and an Epworth Sleepiness Scale >8 were randomised to receive either CPAP therapy (autoset device) with best supportive care, or best supportive care alone, for 12 months. Two hundred and seventy-eight patients were recruited with 140 patients allocated to CPAP. The mean age across both treatment groups was 71 (SD 4.6) years, Oxygen Desaturation Index (ODI) 28.7 (19.1) and Epworth Sleepiness Scale (ESS) 11.6 (3.7). At 3 months, the ESS was significantly reduced in patients receiving CPAP treatment (−3.8, SD 0.4) compared with those given best supportive care (BSC) (−1.6, 0.3), with a treatment effect of −2.1; maintained at 12 months. Quality-adjusted life-years were unchanged between the groups and there was a minor non-significant reduction in healthcare costs in the CPAP group. The authors conclude that CPAP therapy should be offered routinely to older patients with obstructive sleep apnoea syndrome.

TB RISK REDUCED WITH ISONIAZID IN THOSE RECEIVING ANTIRETROVIRAL THERAPY IN AFRICA

Active TB remains a significant challenge in HIV patients despite antiretroviral therapy. Rangaka et al (Lancet 2014;384:682–90) have explored the impact of adding isoniazid to those on antiretroviral medication in areas with a high background prevalence of TB. 1329 patients in South Africa were randomised into the trial, 662 randomised to receive isoniazid and 667 placebo for 12 months. A sputum culture was performed to exclude active pulmonary TB before trial inclusion. At the end of the follow-up period, 95 new cases of TB had been identified; 37 in the isoniazid group (2.3 per 100 person-years, 95% CI 1.6 to 3.1) and 58 in the placebo group (3.6 per 100 person-years, 2.8–4.7; HR 0.63, 95% CI 0.41 to 0.94). Isoniazid was discontinued due to rising alanine aminotransferase levels in 19 patients receiving isoniazid and 10 receiving placebo. As such, the authors conclude isoniazid therapy should be considered standard care for those on antiretroviral therapy in TB prevalent areas.

OXIMETRY DURING INITIAL ASSESSMENT OF BRONCHIOLITIS

Bronchiolitis is a leading cause of infant hospitalisation, but the routine use of pharmacotherapeutic interventions is considered not effective, with guidelines recommending supportive care as the first approach. Increased use of oximetry within emergency departments has led to the concern that this results in a higher hospitalisation rate for milder cases. Schuh et al (JAMA 2014;312:712–18) have performed a randomised double-blind trial investigating this concern. For infants presenting to the emergency department with peripheral oxygen saturations above 87% without other features of severe bronchiolitis, the assessing clinician was told the oxygen saturations were three percentage points higher than the true value. Two hundred and thirteen infants were randomised into the trial with a mean age of 5 months. Triage oximetry values were <94% in 10% of the true oximetry group and 16% of the altered oximetry group. At the primary end-point of 72 h, 44 of 108 patients (41%) in the true oximetry group and 26 of 105 (25%) in the altered oximetry group were hospitalised (difference, 16% (95% CI for the difference, 3.6% to 28.4%); p=0.005), with increased active care received in the true oximetry group. There were no differences in subsequent unscheduled clinic visits at 72 h between groups. As such, oximetry alone is insufficient to identify those who would benefit from hospitalisation.

SYSTEMIC SCLEROSIS AND RISK OF THROMBOEMBOLIC DISEASE

Systemic sclerosis (SSc) is associated with multiple pulmonary complications including interstitial lung disease and pulmonary hypertension. It is also viewed as a risk factor for deep vein thrombosis (DVT) and PE development, but there is limited data on the exact degree of elevated risk. Chung et al (Rheumatology 2014;53:1639–45) have performed a retrospective cohort study in Taiwan, reviewing 1895 patients with SSc diagnosed between 1998 and 2010 and comparing outcomes with 7580 matched controls. The mean follow-up was 3.3 years (SD 3.7) for the SSc cohort and 6.1 years (SD 3.6) for the non-SSc cohort. The overall incidence of DVT (per 10 000 person-years) was 10.9 and 1.08, respectively. Multivariate Cox proportional hazards regression analyses indicated that patients with SSc had a 10.5-fold higher risk of DVT. The overall PE incidence was 7.2-fold higher in the SSc cohort compared with the non-SSc cohort (10.8 vs 1.51 per 10 000 person-years). Within the SSc group, those with comorbidities experienced the highest increased risk of PE (adjusted HR=12.0, 95% CI 3.27 to 44.1). This significant increased risk should be considered when managing patients with SSc.

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