

JOURNAL CLUB SUMMARIES

What's hot that the other lot got

Candy Lee

NO SAFE LEVEL OF TOBACCO SMOKE

In this American prospective cohort study (JAMA Intern Med 2017;177:87-95. http://dx.doi.org/10.1001/jamainternmed. 2016.7511), a dose-dependant association between the number of cigarettes smoked per day at baseline and all cause mortality was shown. It demonstrated that even low intensity smokers (defined as smokers who consistently smoked on average less than one cigarette per day over their lifetime) had a higher risk of death from all causes when compared to never smokers. This group of patients was shown to have a 64% higher risk of earlier death. Patients who smoked between 1 and 10 cigarettes per day had a reported 87% higher risk of death. Lung cancer mortality, in particular, was found to have a strong association, with increased risk of lung cancer death being 9 times and 12 times higher for low intensity smokers and for patients who smoked 1-10 cigarettes per day respectively. This highlights the importance of smoking cessation for all patients, even at low levels of smoking, and provides further evidence that there are risks associated with any level of exposure to tobacco smoke.

CPAP AND BP EFFECT

Clinically relevant increase in blood pressure was seen with the withdrawal of CPAP in patients with moderate to severe obstructive sleep apnoea (OSA) according to this study (Chest 2016;150:1202-10. http://dx.doi.org/10.1016/j.chest.2016.07. 012). The authors analysed blood pressure readings of 153 OSA patients who were established on CPAP and who had participated in three randomised control trials. Patients were randomised to continue CPAP or have CPAP withdrawn for 2 weeks. Morning BP readings were monitored at home and in hospital. In the CPAP withdrawal group, systolic BP increased by 5.4 mm Hg (1.8-8.9 mm Hg; p=0.003)when measured in hospital and by

Correspondence to Dr Candy Lee, Respiratory Medicine and General Internal Medicine, Cardiff & Vale University Health Board, University Hospital of Wales, Heath Park, Cardiff CF14 4XW, UK; clee128@doctors.org.uk

9.0 mm Hg (5.7–12.3 mm Hg; p<0.0001) when measured at home. Diastolic BP increased by 5 mm Hg (2.7–7.3 mm Hg; p<0.001) and by 7.8 mm Hg (5.6–10.4 mm Hg; p<0.001) with hospital measurements and home measurements retrospectively. CPAP withdrawal was noted to result in higher BP rises the greater the severity of OSA and was also found to result in a 20.3% increase in defined hypertension (systolic BP >140 or diastolic BP >90) in previously normotensive patients.

IMPROVING MESOTHELIOMA SURVIVAL

A survival benefit was seen in this study in which patients with advanced (stage III or IV) epithelial malignant mesothelioma were treated with a multi-modality strategy consisting of extended pleurectomy decortication surgery, intra-operative photodynamic therapy and adjuvant premetrexed-based chemotherapy protocol. Seventy-three patients were included in this study (Ann Thorac Surg. Published Online First: 5 Nov 2016. http://dx.doi.org/10.1016/j.athoracsur. 2016.08.071) which showed overall median survival to be 35 months and median disease free survival was 1.2 years. In patients with no lymph node involvement (19 patients), median survival and disease-free survival was reported to be 7.3 and 2.3 years respectively. The authors concluded that although the results are promising although more research is required.

CHRONIC PULMONARY ASPERGILLOSIS MORTALITY

Survival at 1, 5 and 10 years was reported to be 86%, 62% and 49% respectively in this UK retrospective study (*Eur Respir J* 2016:1601062. http://dx.doi.org/10.1183/13993003.01062-2016) that looked at predictors of mortality in chronic pulmonary aspergillosis in a cohort of patients who had been referred to the UK national Aspergillosis centre between 1992 and 2012. Several factors were found to impact mortality. Statistically significant increased mortality was associated with non-tuberculous mycobacterial infection, pleural infection, COPD, lower

albumin, lower activity levels and having the presence of aspergilloma.

TIMING OF POST RESECTION CHEMOTHERAPY FOR NSCLC

Adjuvant chemotherapy is typically given 6-8 weeks post surgical resection of nonsmall cell lung cancer (NSCLC). In this large retrospective observational study (JAMA Onc. Published Online First: 5 Jan 2017. http://dx.doi.org/10.1001/jamaoncol. 2016.5829), delaying adjuvant chemotherapy following surgical resection was found not to have a significant effect on survival. Data were analysed for 12 473 patients with completely resected NSCLC who had adjuvant chemotherapy between 18 and 127 days post surgery. Lowest mortality was seen in patients who started chemotherapy 50 days post operation but there was no significant difference in mortality between this subset of patients and those that commenced chemotherapy 57-127 days after surgery. Patients who had received chemotherapy at a later interval still had better survival rates than those treated with surgery alone. The findings suggest that the benefits of chemotherapy my still be conferred up to 4 months after surgery. Cause and effect link between chemotherapy and survival extension could not be confirmed by the study.

Cochrane newsflash

In this Cochrane review of seven high quality trials, Vitamin D given to people with predominantly mild to moderate asthma reduced the risk of emergency department visits or hospitalisation for asthma from 6% to 3% over 3-12 months (658 adults and 111 children), and also reduced the risk of less serious asthma attacks from 29% to 18% (640 adults and 359 children). The evidence from children with respect to severe asthma exacerbations is still rather limited and we do not know whether effects of supplementation vary according to baseline vitamin D status (Cochrane Database Syst Rev 2016;(9): http://dx.doi.org/10.1002/ CD011511. 14651858.CD011511.pub2)

Competing interests None declared.

Provenance and peer review Commissioned; internally peer reviewed.



To cite Lee C. Thorax 2017;72:294.

Accepted 16 January 2017

Thorax 2017;**72**:294. doi:10.1136/thoraxjnl-2017-209996

