JOURNAL CLUB SUMMARIES

What's hot that the other lot got

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RADIOTHERAPY FOR EXTENSIVE STAGE SMALL CELL CANCER

A Dutch group looked the effectiveness of thoracic radiotherapy for patients with extensive small cell lung cancer. (SCLC) (*Lancet* 2015;385:36–42). Patients with performance stages 0–2 and extensive stage SCLC, who had response after four to six cycles of standard platinum based chemotherapy, with no clinical evidence of intracranial or pleural metastases and no previous radiotherapy were included. Patients were randomised 1:1 to either thoracic and prophylactic cranial irradiation or just prophylactic cranial radiation. There was no statistical difference in survival at 1 year; 33% for the thoracic radiotherapy group versus 28% for the control group. However, the 2-year overall survival was 13% vs 3%. Progression was less likely in the thoracic radiotherapy group than in the control group at 6 months, progression-free survival being 24% vs 7%. There were no severe toxic effects recorded.

CAN A NOVEL ASTHMATIC TREATMENT BE USED ACUTELY?

Asthma control can be difficult to achieve. This study looked at the addition of benralizumab (an anti-interleukin 5α monoclonal antibody) to conventional treatment in those discharged from the emergency department (ED) (http://dx.doi.org/10.1016/j.ajem.2014.09.036). Subjects aged 18–60 with a physician diagnosis of asthma for 2 years who were symptomatic for 3 months with one previous admission within the past year, who presented to the ED with an acute exacerbation, once they were stable with a peak flow of 30% of normal, were started on 40 mg/day of prednisolone for 7 days with an inhaled corticosteroid and randomised to placebo or one dose of benralizumab at 0.3 or 1.0 mg/kg. The results showed that the risk of having an exacerbation was no different at 12 weeks between placebo and the combined benralizumab groups (38.9% vs 33.3%; p=0.67). However, compared with placebo, benralizumab reduced the rate of asthma exacerbations by 49% (3.59 vs 1.82; p=0.01) and exacerbations resulting in hospitalisation by 60% (1.62 vs 0.65; p=0.02). Peripheral eosinophil counts decreased in both treatment groups.

TACROLIMUS FOR INTERSTITIAL LUNG DISEASE?

This study looked at the treatment of ILD in polymyositis (PM) or dermatomyositis (DM). A retrospective observational study of 49 patients (17 PM, 32 DM) was carried out at a single centre (*Rheumatology* 2015;54:39–44). All patients received high doses of prednisolone (0.8–1.0 mg/kg/day) or in severe cases, methylprednisolone pulse therapy (1000 mg/day for 3 days). They then either received cyclosporine (CYC) (2–3 mg/kg/day), i.v. (intravenous) CYC (500 mg/m^2/month) or tacrolimus these could be combined by the treating physician. The treatment group were those who received tacrolimus, the control group were those who received corticosteriods with or without CYC. The primary endpoint was time from the initiation of immunosuppressive therapy to death, relapse or serious adverse event (SAE). SAEs were defined as death or hospitalisation for any cause. Twenty-five patients received tacrolimus. The tacrolimus group had significantly longer event-free survival compared with the conventional therapy group (hazard ration (HR) was 0.32 [95% CI 0.14 to 0.75, p=0.008]), and longer disease-free survival (HR was 0.25 [95% CI 0.10 to 0.66, p=0.005]).

HELP IN SMOKING CESSATION

Cytisine a plant-based alkaloid is a partial agonist of nicotinic acetylcholine receptors. It has been available for smoking cessation since the 1960s, in Eastern Europe. It is low cost in comparison (cytisine, $20–$30 for 25 days; nicotine-replacement therapy, $112–$685 for 8–10 weeks; varenicline, $474–$501 for 12 weeks). A New Zealand based trial randomised 1310 participants to 25 days of cytisine or 8 weeks of nicotine replacement therapy (DOI:10.1056/NEJMoa1407764). Both arms received low intensity behavioural support. One month continuous abstinence rates were higher in the cytisine group (40%, 264 of 655) than the nicotine-replacement therapy group (31%, 203 of 655). The median time to relapse (resumption of smoking) after the quit day was longer in the cytisine group: 53 vs 11 days. Adverse events were more frequent in the cytisine group. These being nausea vomiting and sleep disturbance.

WHAT ARE THE SECONDARY NODULES ON SEEN ON CT?

Nodules are a common finding on CT scan. An American group looked at the incidence and type of nodules found in patients with a primary lung cancer (:http://dx.doi.org/10.1016/j.jtcvs.2014.10.057). Out of 155, 88 (57%) were found to have secondary nodules (SNs). The 88 patients were no different in their initial findings. Of the SNs 11 patients were excluded as they could not be compared on subsequent CT scans. In the remaining 77 patients there were 137 nodules. The mean and median size of the SN were 0.62 and 0.5 cm, respectively. Sixty-seven SNs were ipsilateral, whereas 70 were contralateral. By CT reports, 105 SNs were characterised as solid, 11 were part-solid and 21 were characterised as ground-glass opacities. One hundred and nineteen nodules were evaluated by PET-CT, 14 of these were positive. Thirty-one nodules were surgically resected, 22 were in the same lobe as the primary tumour. The majority of the resected nodules (19) were benign, 13 were malignant. Of the 13 malignant nodules, 8 were distinct primary tumours, 5 had similar histology to the primary tumour. One hundred and five unresected nodules were followed by CT. Two-thirds did not grow. Fourteen nodules grew, of which only 5 were found to be malignant, each being a new primary adenocarcinoma. Overall survival at 5 years was the same as those without SNs.

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