PROTON PUMP INHIBITORS: DO THEY INCREASE THE RISK OF PNEUMONIA?

There have been meta-analyses which have linked an increase in pneumonia with Proton Pump Inhibitors (PPI); however was this association due to confounding factors? This study by Othman et al (doi: http://dx.doi.org/10.1136/bmj.i3813) looked at 160,000 people who received a first dose of PPI who were part of the Clinical Practice Research Datalink (CPRD) a primary care research database. They carried out a self-controlled case series study along with a cohort study; those within the cohort study were matched for age sex and year of prescription. Potential confounders were extracted and evaluated. These were smoking, alcohol use, number of visits to their general practitioner in the year before PPI prescription, immunosuppression and comorbidities based on the Charlson index score. Those who were prescribed PPIs were more likely to have a history of smoking (42.9% vs 33.7% of their matched controls) and alcohol use (29.1% vs 23.9%); they also had a higher burden of comorbidity and used more corticosteroids and opioids. Most patients used PPIs for short periods median 28 days. There were 48,451 patients with at least one episode of Community acquired Pneumonia (CAP), there were 55,822 with an episode of CAP linked to hospital admission or death. Rate of pneumonia for the exposed patients was similar before a PPI prescription (62.1 per 1000 person years of follow-up) to the rate after a PPI prescription (61.4 per 1000 person years of follow-up). However the rate of pneumonia in those not exposed to PPIs increased over the study period. This was explained in the sensitivity analysis. When those who had been admitted to hospital before the prescription of PPI were excluded the incidence rate of pneumonia returned to the rate of the primary analysis. Therefore a new primary care prescription of a PPI is not associated with a risk of developing CAP!

RISK OF TB IN MIGRANTS MOVING FROM A HIGH TO LOW INCIDENCE AREA

A total of 519,995 migrants aged 11 or older who intended to remain the UK for longer than 6 months were screened prior to entry to the UK in their country of origin (DOI: http://dx.doi.org/10.1016/S0140-6736(16)31008-X). They were then reviewed for diagnostic yield, accuracy and complication rate. When all results including indeterminate results, the diagnostic yield for malignancy was 80.8% with the accuracy being 84.6%. When indeterminate results were excluded it rose to 85.7% and 91.7% respectively. These results were achieved with no major complications.

FINDINGS ON CHEST CT BETWEEN PEOPLE WITH AND WITHOUT RESPIRATORY DISEASE

Chest CT findings are often detected in those who are not symptomatic. However may it be a clue to those who might develop respiratory symptoms in the future or be a prompt to ask them about such symptoms? A cohort of 1361 patient’s scans was reviewed. Of these 408 were healthy never smokers, 502 healthy ever smokers and 451 had sputometry consistent with COPD (doi: 10.1371/journal.pone.0166745). The CT’s were scored for respiratory bronchiolitis, emphysema, bronchial wall thickening, expiratory air trapping and bronchiectasis. The results showed 11% of never smokers had evidence of emphysema on CT scan; this increased to 30% in smokers with normal lung function and rose proportionally in patients with COPD. The presence of emphysema was associated with chronic cough (OR, 2.11; 95% CI 1.4 to 3.18); chronic phlegm production (OR, 1.87; 95% CI 1.27 to 2.76); wheeze (OR, 1.61; 95% CI 1.05 to 2.48); dyspnoea (OR, 2.90; 95% CI 1.41 to 5.98); and the risk of ≥2 exacerbations over 12 months (OR, 2.17; 95% CI 1.42 to 3.0).

Competing interests None declared.

Provenance and peer review Not commissioned; internally peer reviewed.