COUGH PLATES VERSUS COUGH SWABS FOR BACTERIAL DETECTION IN CYSTIC FIBROSIS

Obtaining sputum samples from paediatric cystic fibrosis patients for targeted microbiological therapy is difficult. The cough swab is often used, which involves a cotton-wool swab held in the back of the pharynx and the patient asked to cough. An increasingly used alternative technique is the cough plate, which involves patients coughing directly onto a culture plate. A recent study (Arch Dis Child 2013;98:768–71) has compared the two techniques. Both techniques to collect specimens were conducted in a randomised order at assessments. In total, 95 non-expectorating patients (mean age 9 years) took part, with 324 sets of cough plates and cough swabs produced. Pathogens were isolated in 18% of cough swabs compared with 8% of cough plates. Agreement between the two specimen types occurred in only 6% of cases. A similar spectrum of pathogens was produced from both techniques. Although most (84%) patients preferred the non-invasive nature of the cough plates, they appear less effective for isolating bacterial pathogens from non-expectorating patients.

SADDLE EMBOLISM IS ASSOCIATED WITH AN INCREASED MAJOR ADVERSE EVENT RATE

Severity features of acute pulmonary emboli include shock, acute right ventricular (RV) dysfunction and raised cardiac-specific enzymes. Thromboembolism straddling the pulmonary artery bifurcation (saddle embolism) occurs in approximately 5% of PEs. Kwak et al (Br J Radiol 2013;86. doi:10.1259/bjr.20130273) have assessed the significance of this feature in those diagnosed with non-high-risk PE at diagnosis. Records of 297 patients presenting with acute PE were included in the analysis; 10% had a saddle embolus. There was a trend for increased 30-day mortality in the patients with a saddle embolus compared with those without, but this was not statistically significant. Patients with saddle emboli did have a significantly higher rate of major adverse events (shock, mechanical ventilation, in-hospital mortality, thrombosis and thrombectomy, within 30 days).

CHRONIC HYPERSENSITIVITY PNEUMONITIS MAY BE LABELLED AS IDIOPATHIC PULMONARY FIBROSIS

Differences between chronic hypersensitivity pneumonitis (CHP) and idiopathic pulmonary fibrosis (IPF) can be difficult despite assessments of potential environmental triggers being performed. Morell et al (Lancet Resp Med 2013;1:685–94) report the results of a prospective case–cohort study where extended investigations for CHP were undertaken in 46 patients diagnosed with IPF. Investigations included specific IgG determination, bronchoalveolar lavage, bronchial challenge testing with suspected antigens and a review of lung biopsy histopathological features, as well as the collection of microbiological culture specimens obtained from suspected sources in the patient’s environment. Following these assessments, 20 of the 46 (43%) patients were subsequently diagnosed with CHP. The authors report that most of these cases were attributed to exposure to occult avian antigens from commonly used feather bedding and reflect that further research and studies at other centres is warranted.

GLOBAL MORTALITY ESTIMATES FOR THE 2009 INFLUENZA PANDEMIC

The influenza pandemic of 2009 triggered a major public health logistical challenge. The modest number of laboratory-confirmed H1N1pdm09 deaths, however, has caused debate to whether the public health response to H1N1pdm09 was excessive. As of 31 August 2010, the WHO received reports of 18 449 laboratory-confirmed deaths from H1N1pdm09 infection, but it is thought this is a significant underestimate. The WHO funded Global Pandemic Mortality (GLaMOR) project aimed to make a conservative estimate of the global H1N1pdm09 mortality using updated statistical modelling (PLos Med 2013;10: e1001558). Overall, the model estimated that between 123 000 and 203 000 pandemic respiratory deaths occurred. This is similar mortality to seasonal influenza, but the majority of deaths (62–85%) were attributed to persons under 65 years of age compared with an expected 19%.