Respiratory Diseases

164. Chronic Obstructive Pulmonary Disease in Uttaranchal

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In a remote hamlet of Uttaranchal, at 1700 metres above sea level, this clinical study included fifty cases of exacerbation of COPD with evidence of Cor pulmonale. Females were well represented (44%) as they did smoke as well (72.7% of females) and also inhaled smoke from cooking fire without chimneys.

Age group affected was 36-78 years, earlier in females. Breathlessness and wheeze was more complained of than cough. All, except 2 males and 3 females, were thin built. Cyanosis on presentation was noted in 22 (44%), while pitting edema in 18 (36%). Hypertension - stage I and II was noted in unusually high numbers (78%). Evidence of frank RV failure was noted in 11 cases (22%).

ECG evidence of RAD, RV hypertrophy and poor R wave progression in V1-V4 leads was noted though low voltage was not appreciable. ECG evidence of ischemic heart disease was negligible in the series (10%). PEFR ranged from 50 L/min - 110 L/min on presentation.

Prevalence of concomitant hypertension and paucity of ischemic cardiac ailment needs elucidation and elaboration.

Results : Total incidence of VAP was 28.12%. Only one of the 27 noninvasively ventilated patients developed VAP as against 18 patients (45.9%) on IPPV. The length of ICU stay was significantly higher amongst those ventilated invasively. The outcome of more critically ill patients with higher SAPS (Simplified acute physiology score) was poorer irrespective of the mode of mechanical ventilation. The micro organism isolated from cultures of tracheo bronchial aspirations from VAP cases were P. aerugenosa (26%), E. coli (26%), Staph. aureus (16%), Acinetobacter (10%) and mixed culture in 10% cases.

Conclusion : Starting NIV in appropriate selected patients may reduce length of ICU stay, prevent complications like VAP and improve patient outcome.

Concomitantly, this study also establishing the potential of R Waves in patients with COPD and also the role of ECG in the initial evaluation of the respiratory status of patients in such a situation.

661. A Comparative Study of Incidence of Ventilator Associated Pneumonia in Patients on Invasive Versus Noninvasive Ventilator Therapy

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A prospective observational study was conducted in the ICU of a referral hospital to assess the occurrence of ventilator associated pneumonia (VAP) in patients on noninvasive ventilator (NIV) versus those on invasive positive pressure ventilation (IPPV), its risk factors, microbiological profile (etiiology of ventilator associated pneumonia) and their outcome.

Methods : 64 mechanically ventilated patients (37 on IPPV and 27 on NIV) with various medical and surgical causes were included in the study. They were followed up to the discharge from ICU and were monitored for clinical, radiological and microbiological development of VAP and its clinical course.

Results : Out of 42 patients, FOB showed widening of carina in 5 patients, widening of secondary carina in 3 patients, bulge because of extrinsic compression in 6 patients and endobronchial nodule in 2 patients. It was normal in rest 26 patients. Transbronchial needle aspiration (TBNA) was done in all patients and transbronchial lung biopsy (TBLB) was done in 11 where clinico-radiologic findings were consistent with stage 1 sarcoidosis. FOB established diagnosis in 16 patients (Caseating granuloma - 7, noncasating granuloma-8, AFB culture positive-1). It was inconclusive in other patients. One patient developed pneumothorax after TBLB and three patients had minor bleeding after TBNA.

Conclusion : FOB especially TBNA has an important role in the diagnosis of hilar and mediastinal lymphaedenopathy and should be considered before other invasive procedures.

*Adjudged Best Papers and got an award of Rs. 1000/- each from Chairman Scientific Committee, Diamond APICON 2005.