

# European Respiratory Society Annual Congress 2012

**Abstract Number:** 2954

**Publication Number:** P2501

**Abstract Group:** 10.1. Respiratory Infections

**Keyword 1:** Biomarkers **Keyword 2:** Pneumonia **Keyword 3:** Intensive care

**Title:** Incidence of ventilator associated pneumonia (VAP) and assessment of serial estimation of procalcitonin levels as a prognostic marker in cases of VAP in a tertiary centre in India

Dr. Vikas 7268 Sikri vschestdoc@gmail.com MD , Dr. Rajesh 7269 Chawla drchawla@hotmail.com MD , Dr. Raman 7270 Sardana ramansardana@apollohospitals.com MD and Dr. Ashish 7271 Jain drashish\_79@yahoo.co.in MD . <sup>1</sup> Respiratory & Critical Care, Indraprastha Apollo Hospitals, New Delhi, India, 110076 ; <sup>2</sup> Respiratory & Critical Care, Indraprastha Apollo Hospitals, New Delhi, India ; <sup>3</sup> Microbiology, Indraprastha Apollo Hospitals, New Delhi, India and <sup>4</sup> Respiratory & Critical Care, Indraprastha Apollo Hospitals, New Delhi, India .

**Body:** INTRODUCTION Patients developing VAP have higher mortality rates and longer ICU stays. Various markers have been for prognosis in patients who develop VAP. We studied serial estimation of procalcitonin (PCT) levels in VAP as a prognostic marker. AIMS & OBJECTIVES To calculate incidence of VAP per 1000 ventilator days and assess role of PCT as a prognostic marker in VAP. MATERIAL & METHODS All consecutive patients intubated in the ICUs were assessed for development of VAP using CPIS score. In patients who developed VAP during the study period, their serum PCT levels were collected on day 0, 3 and 7 of developing VAP. RESULTS We studied 351 patients, 25 developed VAP. Incidence of VAP was 6.33 / 1000 ventilated days. (Incidence/1000 ventilator days= No. Of VAP cases/ Total ventilator days C 1000).Patients having higher initial levels & in whom the levels decreased subsequently showed better survival as compared to low initial values and a marginal fall/rise in subsequently values. Mean value of PCT in survivor group on 0,3 & 7 days were 45.47, 21.01 and 7.26 respectively (standard error of mean of 34.71, 15.28 & 4.95) while the levels in non-survivor group were 1.94, 2.11 & 1.99 respectively (standard error of mean of 0.72, 0.80 & 1.25). The PCT levels remained low/steady on serial monitoring in the non survivor. CONCLUSIONS Our study further re-enforces the role of serial estimation of PCT as a prognostic marker in patients with VAP. Though further studies with larger number of patients is required to make its estimation as a standard protocol.