2013 Oral Poster Session
Sunday, October 13, 2013
1:30 – 2:30 p.m.

Time: 2:12:00 PM - 2:18:00 PM

Presenter: Nikki Tirada, MD

Title of Abstract: **CT findings in Pulmonary Infections in Immunocompromised Patients in the Intensive Care Unit**

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Modality: Multi

Organ System: Multi

Purpose 1. To review imaging characteristics and parenchymal distribution pattern of different pulmonary infections encounter in immunocompromised patients in the intensive care unit (ICU). 2. Understanding predisposing risk factors and associated organisms in immunocompromised patients. 3. Be able to correlate radiologic appearance with the clinical setting and formulate appropriated differential diagnosis. **Content Organization** Prolonged patient survival and advancement of immunosuppressive agents in treatment of tumors, collagen vascular disease, transplant recipients, and acquired immunodeficiency syndrome (AIDS) has increase the prevalence of pulmonary infections in immunocompromised patients, which constitutes one of the major causes of morbidity and mortality of these patients, and often required ICU admission. We will review the five different types of immune deficiencies related to phagocytosis, B-cells, T-cells, complement system, and hypo/splenectomy defects. Patterns of infection including community-acquired, nosocomial, reactivation, and environment exposure will be discussed. Characteristics CT appearance and distribution pattern of parenchymal abnormalities of common pathogens such as 1) bacterial (S. pneumoni, H. influenza) 2) fungal (pneumocystis jirovecii, aspergillus) and 3) viral (cytomegalovirus, influenza) will be illustrates using images form ICU patients with correlation of microbiological tests such as blood, sputum, bronchoalveolar lavage (BAL) cultures/smears or diagnosis based on treatment responses and clinical follow-up. **Major Teaching Points** Early imaging and prompt diagnosis are essential to the appropriate care of immunocompromised patient with suspected pulmonary infections. It is important for radiology to understand the imaging characteristic and predispose risk factors in order to make accurate diagnosis.