Chronic pulmonary aspergillosis and diagnostic challenge

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Abstract

Chronic Pulmonary Aspergillosis (CPA) is pulmonary disease estimated to affect 3 million people worldwide making it an under-recognized, but significant health problem world-wide, which however confers significant morbidity and mortality. The disease is caused by Aspergillus species, which can reach respiratory tract by air-borne transmission. Any form of lung injury or illness is predisposing factor for development of CPA, among which most common cause is pulmonary tuberculosis. Such pulmonary injury affects local host defenses enabling Aspergillus conidia to germinate within lung. It is crucial to diagnose CPA timely and appropriately to ensure relevant treatment considering similarity of CPA to many other diseases. Diagnosis of CPA is based on well-established diagnostic criteria , which requires thoracic imaging, direct microbiological evidence of Aspergillus infection or an immune response to Aspergillus spp . New laboratory diagnostics have been developed specifically for diagnosing CPA, which need to be evaluated specifically for CPA and utilized for diagnosis.

Biography

Ritu Singhal (MD) is working as Senior Specialist and Quality Co-ordinator in Department of Microbiology, Centre of Excellence (WHO) & National Reference Laboratory (NABL accredited) for Tuberculosis at National Institute of Tuberculosis and Respiratory Disease, New Delhi. She is National level trainer in molecular technologies in TB for SAARC and Union. She has conceptualized many projects with over 32 publications in peer reviewed National and International Journals. She has been awarded Prof. AN Chakrabarty memorial prize for best published paper in IAMM, year 2017, is recipient of outstanding achievement as Fogarty Fellow in 2014.