Title: Tuberculous pleural effusion

Dr. Liza 23117 Ahmad Fisal lizafisal77@yahoo.co.uk MD , Dr. Mona Zaria 23118 Nasaruddin mzaria78@yahoo.com MD and Dr. Aziah 23119 Ahmad Mahayiddin aziah_am@yahoo.com . ¹ Respiratory Medicine, Institute of Respiratory Medicine, Kuala Lumpur, Malaysia and ² Department of Internal Medicine, Universiti Putra Malaysia, Serdang, Malaysia.

Body: Introduction: Tuberculous pleural effusion (TPE) is the second commonest form of extra-pulmonary tuberculosis. Non-empyematus TPE is due to delayed hypersensitive reaction¹ thus pleural effusion acid fast bacilli direct smears and Mycobacterium tuberculosis cultures are inherently negative. This presents a diagnostic dilemma with a subsequent delay in diagnosis and management. Objective: To determine the demographics, clinical presentation, radiological and pleural fluid/biopsy characteristics of TPEs managed at our centre. Method: Patients diagnosed with TPE from January to December 2012 were included. Data was collected from case notes. Results: A total of 31 patients with a median age of 29 years were included with 77.4% men and 22.6% women. Risk factors were present in 64.5% of patients. Common presentations were fever (93.5%), cough (87.1%) and weight loss (83.9%) with a median duration of 30 days. Right-sided pleural effusions were commoner and 30% had lung parenchymal involvement. All the effusions were exudative with 90% lymphocytic. Seven (22.6%) had a definite diagnosis of TPE based on histopathology examination and microbiology. Nine (29%) had a concurrent diagnosis of pulmonary tuberculosis. Conclusion: The analysis of demographics, clinical presentation, radiological and pleural fluid/biopsy characteristics is vital in the diagnosis of TPE. The low median age at presentation together with the absence of lung parenchymal involvement in approximately 70% of our patients suggest that the majority of TPE were a primary form of tuberculosis. ¹ Leibowitz S et al. The tuberculin reaction in the pleural cavity and its suppression by antilymphocyte serum. Br J Exp Pathol 1973;54(2):152.