

## AN ATYPICAL GIANT MANTOUX REACTION NIETYPOWA OLBRZYMLIA REAKCJA MANTOUX

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Sir,

Mantoux tuberculin skin test is used for routine screening of individuals with a high risk of Tuberculosis infection and also for diagnosis of tubercular etiology in various illness [1]. A standardized 5 tuberculin units (TU) of purified protein derivative (PPD) is injected intradermally into the volar aspect of the left forearm and the delayed hypersensitivity reaction is noted by measuring the induration after 48-72 hours. Severe reactions with the formation of blisters and necrosis are very rare [2]. We present a child who developed a very rapid and abnormally large lesion after Mantoux testing.

An eight year old child was admitted with history of fever and since the past 2 months. The child had a normal growth for her age. On examination the left posterior cervical lymphnodes were significantly enlarged, discrete, mobile and non tender. Systemic examination was normal. Her blood picture and Erythrocyte Sedimentation Rate (ESR) were normal. A Mantoux test was done with the standard 5 TU Purified Protein Derivative (PPD) given intradermally. An immediate and exaggerated reaction with blisters and induration measuring 25X30mm was noticed within 6 hours after administering the test (Fig. 1). Enzyme linked immunosorbent assay (ELISA) for human immunodeficiency virus (HIV) was nonreactive. Chest radiograph looked normal and sputum tested did not show any Acid Fast Bacilli (AFB). Her lymph node biopsy showed features of reactive lymphadenitis. Child was not started on antitubercular therapy but was treated with a short course of antibiotics and was asymptomatic at followup.

Our child had demonstrated an atypical and uncommon phenomenon since tubercular response is a delayed type of hypersensitivity reaction. Active tuberculosis, high mycobacterial antigen load or lepromatous leprosy may cause an exaggerated Mantoux response [3]. Patients who have an induration of more than 20mm have a higher chance

of developing active tuberculosis than those with 10mm induration [4]. Tuberculin testing is useful for assessing the prevalence of tubercular infection in the developing countries. It should be administered and interpreted with caution and the decision of starting on antitubercular therapy is finally based on the clinical scenario and the results of the other tests for confirming tuberculosis.



**Figure 1. An exaggerated and rapid Mantoux reaction 6 hours after tuberculin administration**

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