Lymphangitis after tuberculin test

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ABSTRACT: After Mantoux testing with purified protein derivative (PPD) equivalent to 5 tuberculin units (TU), a 28 yr old man developed extensive erythema, induration and proximal lymphangitis. This is the only such case observed after Mantoux testing in approximately 500,000 subjects during 10 yrs in the Greek Army.

Recently, a healthy subject was seen to develop extensive erythema, induration and lymphangitis after Mantoux testing. Since 1980, all new military personnel in the Greek Army have undertaken Mantoux testing before BCG vaccination. During a ten year period (1980–1989) approximately 500,000 subjects have been tested by highly experienced medical staff. One of the subjects tested developed lymphangitis on the proximal area of the test site. This patient was a 28 yr old man. Physical examination and chest radiograph were normal. A Mantoux skin test with 0.1 ml of 1/5,000 dilution of tuberculin purified protein derivative (PPD) (2 tuberculin units (TU), PPD-RT23 of Hellenic Pasteur Institute) equivalent to 5 TU of PPD was performed on the left forearm. After two days the test site showed erythema 5x5 cm and induration 4x5 cm with central blistering. There was also proximal lymphangitis extended upwards from the top of the lesion to the ipsilateral axilla. The lymphangitis improved one week later, but induration was visible one month later.

The tuberculin was a product of Hellenic Pasteur Institute in bottles of 20 ml. Approximately 10,000 subjects had been vaccinated with the same serial number product without causing any other case of lymphangitis.

In the literature in English there is only one paper describing five cases of lymphangitis after Mantoux test [1]. The dosage used in all of these cases was 10 TU PPD-S (1:1000 dilution), which is about double that used by us. Based on our experience from a large number of subjects examined in the last ten years, we conclude that lymphangitis after Mantoux skin test is extremely rare.

References