

INFORMATION SHEET

Mendel-Mantoux Tuberculin Test

The clinical diagnostics comprise lung X-rays as evidence of the disease and a Mendel-Mantoux tuberculin test.

The Mendel-Mantoux tuberculin test is sometimes used when monitoring patients' contacts. It is performed 6-8 weeks after the patient has had potential contact with pathogens, after determining the patient's base value. The doctor responsible for treatment decides whether the test is necessary.

Mendel-Mantoux Tuberculin Test: Procedure

In Lower Austria, "TUBERCULIN PPD RT 23 SSI, STATENS SERUM INSTITUT" is supplied for the intracutaneous Mendel-Mantoux test. The test is almost painless, and involves intradermal injection of the tuberculin solution (0.1 millilitres in the desired dilution) into the volar or dorsal surface (inner or outer side) of the forearm. A bleb will form almost immediately at the site of the injection, and an area of induration (diffuse or well-defined area of hardening and thickening of the tissue) may later develop.

The accuracy of the Mendel-Mantoux tuberculin test is increased if the patient's base value is already available. The base value is determined using a two-step procedure. The first test run serves to determine the patient's starting values, while the second step relativizes the booster effect. The second test should be performed within 3-4 weeks of the first test if the result produced an induration smaller than 10 mm.

Evaluating the Mendel-Mantoux Tuberculin Test:

A Test results are collected 48 hours at the earliest, preferably on the third day but at the latest one week after the test is performed. The induration is marked, measured, documented and assessed. An induration of < 5 mm is generally without significance; 10 mm indicate a possible TB infection in risk groups and in cases of contact to patients with open TB, while induration of 15 mm or ulcerous skin reaction indicates that infection with TB is highly probable. The Mendel-Mantoux tuberculin test does not supply information about the extent, degree of infectiousness or localization of the TB but merely signals the organism's antigen-antibody reaction to tuberculosis pathogens.

A positive skin reaction indicates that the tested patient has had contact with tuberculosis pathogens. It does not indicate that the patient has tuberculosis.

The test results are noted in the patient's vaccination record.

Glossary:

Antigen: Foreign protein that stimulates the production of antibodies in the blood or tissue.

Bleb: Collection of fluid in the skin, with corresponding marked swelling

Booster effect: Immunological secondary response, i.e. the organism's more active answer to a repeat contact with an antigen, taking the form of an accelerated "anamnestic" antigen-antibody response and prompt, vigorous production of the - previously scarcely detectable - specific antibody, as a "booster response" to a relatively low administration of antigen.

Intracutaneous: Into, or located in, the lower layers of the skin

Mendel-Mantoux Tuberculin test: Intracutaneous tuberculin test serving to diagnose tuberculosis infections by means of local induration (thickening of skin), to determine the patient's response to allergens (prior to BCG vaccination) and to control conversion (reversal) after the injection.