AVIAN TUBERCULIN PPD
(For human use)

AVAILABILITY

AVIAN TUBERCULIN PPD is prepared from atypical *Mycobacterium avium*.

It is available as a diluted solution (0.002 mg/mL or 100 IU/mL) in a 1 mL size. This material is ready for use and requires no further dilution. It contains 0.005% v/v Tween 80 and 0.5% w/v phenol.

ACTIONS

AVIAN TUBERCULIN PPD contains soluble growth products derived from *M. avium*. When administered intradermally, a hypersensitivity reaction, manifesting as induration and erythema, will appear in sensitive individuals. A positive reaction is an indication that the patient has had, at some time, a tuberculous infection. A positive test does not indicate the presence of an active infection, but indicates that further evaluation should be done.

INDICATIONS

Used in skin testing as an aid in the diagnosis of infection with *M. avium*.

METHOD OF USE - THE MANTOUX TEST

Inject intradermally 0.1 mL of a solution containing 100 IU per mL (ie. 10 IU per dose of 0.1 mL) into the ventral surface of the upper part of the forearm. The resultant reaction is normally read at 72 hours but could be read from 48 hours to the fifth day. The characteristic reaction consists of a circular area of induration which may or may not be accompanied or surrounded by erythema. The reaction commences within 24 hours and reaches a maximum size in 48 to 72 hours. It then gradually subsides although it usually remains visible for several days.

Rarely, vesiculation or even local necrosis may occur, sometimes accompanied with lymphangitis or regional adenitis. When reading the reaction, it is the oedema or induration that is important and this can usually be detected more easily by the finger than the eye. The diameter of the area of induration or oedema should be measured in millimetres and recorded. Any vesiculation or necrosis should also be recorded. Erythema without oedema or induration should be disregarded.

The National Tuberculosis Advisory Council (Canberra) has suggested the following degrees of reaction to the 10 IU dose Mantoux Test:

- **Negative** - less than 5 mm diameter
- **Weak positive** - 5 to 9 mm diameter
- **Intermediate positive** - 10 to 14 mm diameter
- **Strong positive** - 15 mm diameter or more with vesiculation

**Important:** A separate syringe should be kept for tuberculin testing and should not be used for any other purpose.
For differential Mantoux testing in humans, an intradermal dose of 10 IU (0.0002 mg) of AVIAN TUBERCULIN PPD contained in a 0.1 mL volume is used. Parallel testing should be carried out with a dose of 10 IU (ie. 0.0002 mg PPD per dose of 0.1 mL) of the human PPD.

WARNINGS

Tuberculin PPD should not be administered to known tuberculin-positive reactors because of the severity of reactions (eg. vesiculation, ulceration or necrosis) that may occur at the test site in very highly sensitive individuals.

Avoid injecting tuberculin PPD subcutaneously. If this occurs, no local reaction develops, but a general febrile reaction and/or acute inflammation around old tuberculous lesions may occur in highly sensitive individuals.

PRECAUTIONS

As with any biological product, adrenaline should be immediately available in case an anaphylactoid or acute hypersensitivity reaction occurs. Tuberculin testing should be done with caution in persons with active tuberculosis. However, activation of quiescent lesions is rare. It should be noted that reactivity to tuberculin PPD may be depressed or suppressed for as long as four weeks by viral infections, live virus vaccines, (eg. measles, polio, rubella and mumps), or by the administration of corticosteroids. Malnutrition may also have a similar effect. When of diagnostic importance, a negative test should be accepted as proof that hypersensitivity is absent only after normal reactivity to nonspecific irritants has been demonstrated.

A positive tuberculin reaction does not necessarily signify the presence of active disease. Further diagnostic procedures should be carried out before a diagnosis of tuberculosis is made.

ADVERSE REACTIONS

In highly sensitive individuals, strong positive reactions including vesiculation, ulceration, or necrosis may occur at the test site. Cold packs or topical steroid preparations may be employed for symptomatic relief of the associate pain, pruritus, and discomfort. Minimal bleeding may be experienced at a puncture site. This occurs infrequently and does not affect interpretation of the test. Strongly positive test reactions may result in scarring at the test site.

FURTHER READING


STORAGE

Store, protected from light, at 2°C to 8°C. Do not freeze.