NEW ZEALAND IMMIGRATION

Guidelines for Medical Assessors: Syphilis Screening

Version 1 June 2023

Contents

Purpose of this document 2
Background 2
About syphilis 2
Primary syphilis 2
Secondary syphilis 2
Tertiary syphilis 2
Latent syphilis 3
Diagnosis of syphilis 3
Non-treponemal tests 3
Treponemal tests 4
Other tests 4
False positive reactions 4
Treatment of syphilis 4
Assessing syphilis for ASH requirements 4
Making further information requests (FIRs) to applicants with syphilis 4
Wording FIRs for applicants with syphilis 4

NEW ZEALAND
IMMIGRATION

PURPOSE OF THIS DOCUMENT

This document provides information about the testing and treatment for syphilis. It also offers guidance about requesting further information to assist in assessing whether an applicant meets ASH requirements.

BACKGROUND

Syphilis is a sexually transmitted disease (STD) caused by a bacterium called Treponoma pallidum pallidum. Infectious syphilis is a notifiable disease in New Zealand and its incidence has been increasing since 2000. Long-term untreated syphilis can be very serious, permanently debilitating and sometimes fatal.

If an applicant has a reactive test result for syphilis, you must get confirmation of the diagnosis and confirm that the applicant has been treated appropriately – for example, with weekly doses of penicillin for three weeks.

ABOUT SYPHILIS

Syphilis has three clinical stages plus a latent phase. Around 50% of people will have no symptoms and are diagnosed on serologic tests. For visa applicants this often occurs when they do an IME.

Primary syphilis

The incubation period for primary syphilis is 10 to 90 days, with an average of 21 days. The most common presentation is a painless genital ulcer which often heals within a few weeks, even if it is not treated.

Secondary syphilis

The incubation period for secondary syphilis is 2 to 24 weeks, with an average of 6 weeks. This may present with symptoms such as fever, malaise, headache and lymphadenopathy. More than 90% of cases develop a rash. Alopecia and condylomata lata are also common symptoms. All symptoms resolve slowly over some weeks, even if they are not treated.

Tertiary syphilis

Tertiary syphilis develops in about one third of untreated syphilis infections. It can occur months or years after the syphilis infection was first acquired and can be fatal. Tertiary syphilis can affect multiple organ systems including the brain, nerves, eyes, heart, blood vessels, liver, bones and joints. The symptoms of tertiary syphilis vary depending on the organ system affected.

NEW ZEALAND
IMMIGRATION

Latent syphilis

The latent (hidden) stage of syphilis is a period of time when there are no visible signs or symptoms of syphilis infection. If untreated, all people become asymptomatic over a period of 12 to 24 months after infection. After 24 months people are no longer infectious, but the infection can be passed on to an unborn foetus.

There are two types of latent syphilis:

- Early latent syphilis is where infection occurred within the past 24 months.
- Late latent syphilis is where infection occurred more than 24 months ago.

DIAGNOSIS OF SYPHILIS

Syphilis can only be diagnosed through a range of tests, some of which need to be repeated to confirm a positive diagnosis. Appendix 1, Algorithm for syphilis screening and confirmatory testing, shows the sequence of testing for determining an infection.

Syphilis serology can be difficult to interpret. It can take up to 90 days for a test to become positive after infection and some serological tests remain reactive for life, even after successful treatment.

Auckland Sexual Health Service recommends that all positive syphilis serology tests should be discussed with a sexual health specialist.

Follow-up testing to monitor non-treponemal test titres (PRP/VDRL) is important to establish that a cure has been effective.

Non-treponemal tests

VDRL, RPR and EIA tests are all considered to be non-treponemal tests (or non-specific) for syphilis. They are widely available, rapid and relatively inexpensive. The VDRL and RPR tests can also be used for quantitative evaluations – looking at the change in titre dilution over time, where falling titres may indicate successful treatment or where a four-fold rise in titres is indicative of reinfection.

The limitations with all these tests, if used on their own, are:

- They lack sensitivity with late latent or late active syphilis.
- Between 1% and 2% of patients with secondary syphilis will have false negative results.
- Some antibodies other than treponemal antibodies cause biological false positive reactions.

NEW ZEALAND
IMMIGRATION

Treponemal tests

Because of the limitations of the non-treponemal tests there are also more specific treponemal tests – for example, TPHA or TPPA tests or treponemal antibody EIA tests.

The TPHA test is highly sensitive in all stages of the disease except possibly in early primary syphilis.

Other tests

IgM capture EIA tests are mainly used to diagnose congenital syphilis, or for differentiating past infection from current or recent infection. These are also useful for detecting early syphilis infection.

False positive reactions

All of the available serological tests may produce false positive reactions, especially in low prevalence populations. Many medical conditions including acute and chronic viral infections, pregnancy, malignancy and auto-immune disorders can give rise to false positive results.

However, when two or three different serological tests are positive (EIA, RPR, TPPA) the patient is highly likely to have either a current or past infection with syphilis.

TREATMENT OF SYPHILIS

The Aotearoa New Zealand STI Management Guidelines for use in Primary Care recommend that treatment should be given by, or after discussion with, a sexual health specialist. The guidelines include testing and treatment options.

STI Management Guidelines – syphilis

ASSESSING SYPHILIS FOR ASH REQUIREMENTS

Making further information requests (FIRs) to applicants with syphilis

If there is evidence of syphilis infection and a false positive result has been excluded, then make a FIR for an assessment by a sexual health specialist.

Wording FIRs for applicants with syphilis

Use or modify this wording to create a FIR.

> A report from an infectious disease or sexual health specialist is required regarding the applicant's syphilis test results. This should include: history, diagnosis, clinical

NEW ZEALAND
IMMIGRATION

examination findings, the results of any additional investigations performed, management needs and long-term prognosis.

If the applicant is being treated for syphilis, provide details of the medication used including the drug names, dose and dates administered.