NZSHS
THE NEW ZEALAND SEXUAL HEALTH SOCIETY
SEXUAL HEALTH FOR ALL

Herpes Simplex Virus Serology

Screening

Testing as part of a routine sexual health screen is not appropriate:

- Results may be unhelpful and difficult to interpret
- False positives are common in the general population (as prevalence is relatively low) and confirmatory testing of positives is not available in NZ
- No curative therapy is available

Epidemiology

- Approx. **50-70% of the adult population are seropositive for HSV-1**
- ~25% of Auckland Sexual Health Service patients are seropositive for HSV-2
- ~18% HSV-2 seropositive in Dunedin Cohort Study – aged 32

Appropriate Situations for Use of HSV Serology

Situations in which HSV serology may be appropriate are as follows:

- Recurrent genital lesions that are repeatedly negative by direct testing

Note: Every effort should be made to diagnose lesions with direct testing methods. Positive serology in this setting confirms the presence of HSV but does not necessarily mean that the observed genital lesions are caused by HSV.

- Clinically discordant couples in a long-term relationship
- Pregnant woman with a partner who has confirmed genital herpes

Pre-test and Post-test Counselling

Pre-test and post-test counselling are essential:

- Interpretation of possible result combinations should be discussed with the patient before testing
- Both partners of a couple should be tested
- Results are best given in person

Tests

General Points

- ELISA – specific for HSV-1 and HSV-2 antibodies
- No confirmatory testing is available in NZ at present
- Sensitivity and specificity are approx. 96-98% – false negatives and false positives may occur, particularly in a low prevalence population
- **Window period between infection and seroconversion is on average 6 weeks but may take up to 6 months**

Interpretation of Test Results

HSV-1 and HSV-2 Seronegative

- Implies no infection with either HSV-1 or HSV-2
- Note window period

HSV-1 and HSV-2 Seropositive

- Implies infection with both HSV-1 or HSV-2
- Usually this would suggest orolabial HSV-1 and genital HSV-2

Note:

- HSV-1 infection may be genital, ophthalmic, or extragenital e.g. Whitlow
- HSV-2 may occasionally cause extragenital infections
- Dual genital infection with HSV-1 and HSV-2 is possible

HSV-1 Seropositive, HSV-2 Seronegative

- Implies infection with HSV-1
- History of orolabial lesions would suggest this as a site of infection

Note:

- **Up to 30% genital infection is due to HSV-1**
- Dual orolabial and genital infection with HSV-1 is possible

HSV-1 Seronegative, HSV-2 Seropositive

- Implies infection with HSV-2
- Usually this is due to genital infection

Note: Occasionally HSV-2 will infect non-genital sites.

Management

- Treatment decisions should be based on clinical findings

Referral Guidelines

Referral to a Specialist Sexual Health Service is recommended for:

- Above clinical situations if the clinician requires management advice

Further Information

Note: An in-depth guideline for the management of Genital Herpes has been produced by the Professional Advisory Board of the Viral Sexually Transmitted Infection Education Foundation.
www.herpes.org.nz

This best Practice Guide has been produced as a collaborative project by Counties Manukau District Health Board and Auckland Sexual Health Service, and has been adapted for use by NZSHS as a National Guide for the Diagnosis and Treatment of Sexually Transmitted Infections. Updated – 2009.