

Streptococcal Antibody Testing

Streptococcal antibody tests are used to confirm recent infection by Group A betahaemolytic streptococci, when assessing patients with possible non-suppurative complications due to undiagnosed or untreated Group A Streptococcal infection.

The two main clinical indications for testing are patients with suspected **acute rheumatic fever** or **acute glomerulonephritis**.

Streptococcal antibody testing comprises the following two assays:

- Anti-streptolysin O titre (ASOT)
- Anti-deoxyribonuclease B titre (anti-DNase B)

The serum ASOT reaches a maximum around three to six weeks after infection and starts to fall in six to eight weeks. The serum anti-DNase B titre can take up to six to eight weeks to reach a maximum and starts to fall three months after infection. In the absence of reinfection, the ASO titre usually approaches pre-infection levels after six to 12 months, whereas the anti-DNase B titre tends to remain elevated for longer¹.

Testing outside of the two clinical indications mentioned above, although often requested and performed, is rarely indicated.

From **13th November 2017**, ASOT and anti-DNase B tests will only be performed by the laboratory if there are accompanying clinical details to suggest that rheumatic fever or glomerulonephritis is clinically suspected.

All other clinical indications for testing should be discussed with the clinical microbiologist in the first instance.

References:

- 1. <u>http://assets.heartfoundation.org.nz/shop/marketing/non-stock-resources/diagnosis-</u> <u>management-rheumatic-fever-guideline.pdf</u>
- 2. Starship Guidelines: Glomerulonephritis

Please ensure all members of your institution receive a copy of this clinical update.

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