



TROUBLESHOOTING FTA-ABS TEST

Weak fluorescence:

1. Generally the fluorescence is weaker compared to other IFA. Extended examination time causes fading and makes interpretation more difficult.
2. In a 1:5 dilution sera show reactivity but the fluorescence is weak. Positive screening tests like TP PA (positive for 1:80 dilutions only) may indicate persisting titer showing a weak fluorescence in the FTA-ABS test.
3. The room has to be darkened. In case of diffused light or eyes not adapted to darkness the treponema only show a very weak fluorescence.

False negative results:

1. Check reactivity of the reagents using a positive control. Non reactive treponema are hard to identify and weak fluorescence appears to be negative if there is diffuse light.
2. IgM reaction is weaker compared to IgG fluorescence. Do not compare intensity of IgG controls with IgM samples. .
3. FTA-ABS test kits are manufactured for IgG detection. IgM sensitivity depends on the antigen which may vary from lot to lot. In general the manufacturer gives information about IgM sensitivity for the corresponding antigen lot.

False positive results:

1. Samples showing titers > 1:10 dilutions are rarely interpreted false positive. Sometimes in a 1:5 dilution the treponema show a faint reaction that seems to be positive. This reaction is serum dependent and the fluorescence seems to be non homogeneous; some of the treponema show homogeneous fluorescence, while others show dotted fluorescence or are negative. Samples showing such pattern are considered to be negative.
2. Without absorption about 30 – 40% of all samples show positive reaction in the FTA-ABS test. Absorption reduces this phenomenon down to 0.5 – 3% of the samples. Comparison of different sorbent has shown serum dependent differences in the absorption.

Unspecific background reaction

1. In some wells a fluorescence of small dots can be seen in the background. This reaction caused by the serum sample does not influence the result.
2. For IgM sometimes positive samples show halo fluorescence caused by fluorescence of the treponema and the extra cellular surrounding. Despite this halo the fluorescence is definitely to read. This phenomenon is serum dependent.