



TOXO TEST

Toxo TEST is for qualitative or semiquantitative detection of antitoxoplasma antibodies by agglutination method. Both IgG and IgM Antibodies are detected with sensitivity of 5 IU/ml. The differential detection of IgG and IgM can be made after 2-mercaptoethanol treatment.

INTRODUCTION:

It is considered that Toxoplasmosis is the most prevalent parasitosis in the world. The casual agent is the protozoa toxoplasma gondii, which is transmitted via infected domestic animals (dogs, cats, rabbits).

Most of the seropositive cases correspond to subclinical infections, due to the fact that the antibody level stays for several years. In pregnant women, it is recommended to do the test between 2nd and 3rd months of pregnancy and a second one between 6th month and the end of the pregnancy, to detect primary material infections, because the transplacental infections can affect the foetus and even cause his death, depending on the time that the infection occurs. Finally, an acute disease or lymphonodal Toxoplasmosis appears in some adults that manifest rash, pulmonary involvement and enlarged lymph nodes.

STORAGE:

The reagent and controls will remain stable until the expiration date printed on the label, if stored between 2 and 8^o C. **Do not freeze. Shake the latex before use.** After that it must be uniform and without visible clumping. The sensitivity of the test depends on the drop volume, do not use other than those provided and place the dropper perpendicular to the slide surface.

REAGENTS AND MATERIAL PROVIDED:

1. Toxo Latex Reagent
2. Positive control
3. Negative control
4. Slide
5. Mixing sticks.

CAUTION:

All human controls have been tested and found negative for HbsAg and HIV. However the reagents should be handled with necessary precautions.

MATERIAL REQUIRED NOT PROVIDED:

5% 2 – Mercaptoethanol in Normal Saline.

SAMPLE COLLECTION:

Use fresh serum obtained by centrifugation of clotted blood. If the test is not carried out the same day, the sample can be stored between 2^o - 8^o C for 48 hours.

For longer periods the sample must be frozen and Hemolytic, lipemic or contaminated sera must be discarded.

PROCEDURE:

QUALITATIVE TEST:

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| Allow the reagent and controls to reach Room Temperature. |
| Place a drop of UNDILUTED serum in one circle of the slide, one drop of positive control in another circle and one drop of negative control in the third circle. |
| Add a drop of TOXO PLASMA LATEX reagents next to the drop of serum and controls. |
| Mix both drops with a mixing stick covering the full surface of each circle. |
| Rotate the slide manually for 2 minutes. |
| Read for the presence or absence of agglutination. |

INTERPRETATION OF THE RESULTS:

The clear agglutination indicates the presence of antitoxoplasma antibodies in the sample. The lack of agglutination indicates absence of antitoxoplasma antibodies in the sample. Remember slight granulation of the background without an clearing should not be confounded with an agglutination and should be considered as a negative reaction.

SEMI QUANTITATIVE TECHNIQUE:

Make serial dilutions ((1:2, 1:4, 1:8, 1:16, 1:32 etc.) of sample in normal saline. The test should be performed in the same way as in the qualitative technique, but using different dilutions of the serum.

PRETREATMENT OF SAMPLE FOR IgG ANTIBODY:

Pretreatment is helpful to differentiate IgG from the IgM antibodies.

50 ul of the 2-mercaptoethanol solution to 1 ml serum

Incubate at 37 ^o C for 1 hr.

Perform the test in the same way as in qualitative or quantitative test using the pretreated serum
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After the pretreatment the positive reaction indicate the IgG antibody. The reduction (the reduced value) in the antibody titre after pretreatment indicate the level of IgM antibody present. If there is no IgM antibody present, no agglutination occurs when treated sample is used.

INTERPRETATION OF RESULT:

The approximate titre will correspond to the highest serum dilution that presents a clear visible agglutination. The level of antitoxoplasma antibodies (IU/ml) in the sample (approximately) will correspond to the reciprocal of the highest dilution, in which a clear agglutination is visible, multiplied by a factor of 5 IU/ml.

NOTES:

Do not use after the expiration date. Allow to reach room temperature before use. Discard if there is evidence of freezing, or contamination. The results should be read after 6 minutes from the beginning of the reaction. The reaction is not affected by lipoproteins of cholesterol as hemolytic test does.

REFERENCES:

1. J.C. Fourlinnie, R. Guffroy, J.C. Herbaut et A. Labarthe Feuillet de Biologies, 1985, Vol. XXVI, no 146, 47-49.
2. P.Le Pape, M. Miegerville et O. Marin (Service Pr.vermeil) Feuillet de Biologie, 1985, Vol. XXVI, no 142.