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PREPARATION OF MICROSCOPICAL SLIDES TO SIMPLIFY IMMUNOFLUORESCENCE SEROLOGICAL TITRATIONS

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SUMMARY

A simple technique to make possible running as much as ten immunofluorescence reactions per microscopic slide is described, so as to facilitate routine work.

Immunofluorescence serological methods are becoming increasingly frequent in clinical laboratories, as they present many advantages upon other methods. We may quote as examples, the reactions for syphilis (HUNTER et al. [3]; COLOMBANI & RIPAULT [2]) and toxoplasmosis (CAMARGO [1]). In spite of their simplicity, they require handling and microscopical reading of many slides. This last step is very strenuous, as dark field and oil immersion observation is required. Usually only two or three reactions are carried out in each slide, in areas marked by abrasive or silicone. In our laboratory the microscopical observation has been very much simplified, increasing the number of reactions carried out in each slide, so as to allow a greater series of reactions to be seen by the observer by a simple movement of the microscope stage, without need of individual focusing. Our routine includes ten reactions in each slide, using it in several techniques, as test and titration of *Toxoplasma gondii, Treponema* and *Trypanosoma* antibodies. Volumes of about 0.01 ml of the antigens (bacterial or protozoal suspensions) are pipetted in small, about 5 mm side, squares, marked on the slides. After drying, the slides are ready for use. Each small area is alloted to a serum or to a serum dilution (volume of 0.01 ml, approximatively). Each set of five squares is kept inside an area coverable by an ordinary 18 × 18 mm coverslip. Each slide has two such areas, as shown in the picture. When acetone solubility does not matter, squares are marked with red nail polish slightly thinned with acetone, put inside a small pipette connected to a gauge 12 needle, without bevel. For more permanent marking, as when antigens must be fixed by acetone (as in the syphilis reaction), we use Araldite (Ciba). Equal parts of the two Araldite components (adhesive and hardner) are mixed and immediatly thereafter acetone is gradually added with mixing until sufficiently thinned, for the purpose. A small amount of safranin powder is previously added to the acetone to stain. We use a small bore Pasteur pipette to trace the squares with Araldite.

RESUMO

Preparo de lâminas microscópicas para facilitar titulagens sorológicas em imunofluorescência

Descreve-se meio simples para permitir a realização de até dez reações de imunofluorescência em cada lâmina microscópica. O interêsse do método reside especialmente em facilitar a leitura microscópica.

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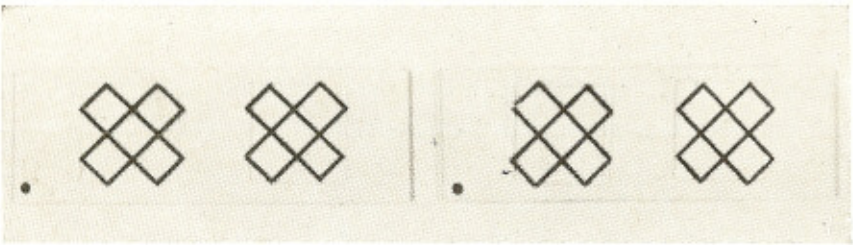

Fig. 1 — Microscopic slides for immunofluorescence serological titrations

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