

SEROLOGY OF INFECTIOUS DISEASES: USE OF A MULTIPARAMETRIC AUTOMATED ANALYSER.

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Recently DIESSE Diagnostica Senese S.p.A. has developed a multiparametric automated system (CHORUS) which can perform different methods simultaneously (EIA Immunoenzymatic method and CFT Complement Fixation). Moreover, it makes use of a dedicated multiple-tube and single test device (strip) with ready-to-use reagents.

Aim: the aim of our analysis was to evaluate whether the instrumentation can be used for small and medium-size routines, characterized by the following requirements:

A- dedicated at the same time to many infectious parameters (influenza and Parainfluenza viruses, EBV, pneumotropic, neurotropic, gastric viruses etc.) and **B-** characterized by urgency, so as to provide a serological diagnosis in the shortest time.

Materials and methods. 73 serum samples were analyzed from the same number of pediatric patients showing signs of infection clinically imputable to Epstein Barr Virus and 42 serum samples from the same number of pediatric patients with requirements of respiratory Viruses (Influenza A and/or Influenza B and/or Adenovirus and/or Legionella). We compared the new system with those used in our routine laboratory (EIA method: Biotec company, Complement Fixation: Seramat DIESSE Diagnostica Senese S.p.A.).

Results. The determination of the anti VCA antibodies IgG and IgM in the 73 analyzed sera resulted: 64 samples agreed both for IgG and IgM (87.7%) and 9 disagreed (12,3%); out of these latter ones, 3 samples disagreed both for IgG and IgM, 5 samples disagreed only for IgG and 1 sample only for IgM. As far as it concerns CFT, out of the 43 analyzed samples 34 agreed (30 negatives and 4 positives) (79,1%), 3 disagreed (7,0%) and 6 were doubtful (13,9%).

Remarks and conclusions. Such instrumentation, both for the characteristics of the system (the single test ready-to-use device contains all the reagents necessary to perform of the test) and for the good results, although at a preliminary stage, allows to affirm that it fits well with the management and organization of the laboratory, above all to satisfy the urgent multiparametric requirements of small runs.