

The background of the cover features a collage of laboratory glassware. In the upper left, a test tube is tilted, showing a pink liquid with a white, foamy head. To its right, several other test tubes are visible, some containing yellow and red liquids. In the lower left, a rack of test tubes is shown, with some containing orange and yellow liquids. In the lower right, a beaker contains a red liquid. The overall scene is brightly lit, suggesting a laboratory environment.

New Developments in

Epstein-Barr Virus Research

Constantine S. Umar
Editor

NOVA

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Chapter XII

Microbiological Diagnosis of Infection by the Epstein-Barr Virus: Pathogenic Basis

*José Gutiérrez**, *Antonio Sorlózano*,
María José Soto and Carmen Maroto

Department of Microbiology and Research Group for

"Study of Infectious Agents Related to Clinical Processes of Unknown Cause",
School of Medicine, University Hospital San Cecilio, University of Granada, Spain

Abstract

This study is a review of current knowledge concerning the pathogeny of infection by the Epstein-Barr virus. An analysis is made of the biological events that take place in primary infection, persistent chronic infection, oncogenic transformation, and viral co-infections. Phenomena surrounding the non-specific clonal stimulation of B lymphocytes are explained. A review is also made of clinical laboratory tests available for the serodiagnosis of primary and persistent chronic infections, including the clinical significance of different classes of antibody, the value of IgG avidity assays and the use of recombinant antigens in diagnostic equipment. The characteristics of commercially available equipment are also reported. Laboratory procedures based on previous protocols are proposed. Finally, the tests that can be used to detect virus-related tumors are discussed.

* Correspondence: Dr. J. Gutiérrez, Dept. of Microbiology, School of Medicine, Av. de Madrid, 11, E-18012 Granada, Spain. Fax: +34 958 24 61 19; Tel: +34 958 24 20 71; E: josegf@ugr.es