

Title: CELL CULTURE HSV CLINICAL ISOLATES AND THEIR SUSCEPTIBILITY TO ACYCLOVIR.

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Abstract:

The cell culture is a laboratory methodology considered as gold standard in virus isolation. Beyond this advantage, the host system allows the study of the virus cytopathological changes, as well as, the virus amplification for several uses. The development of antiviral drugs and the molecular aspects of the virus/cell interaction are other possibilities of analysis by the use of cell cultures. The main purpose of this work was to establish the susceptibility pattern of clinical isolates of HSV to acyclovir (ACV) and whether ACV therapy would or would not be recommended. The development and the characterization of the isolates CPE was also considered. Therefore, the aim of this study consisted of the isolation and adaptation of HSV from clinical specimens, in cell culture. The isolates were subjected to serotyping by polymerase chain reactions and the isolates susceptibility to acyclovir was carried out by MTT assay (dimethyl-tiazolil-diphenyl tetrazolium bromide. Preliminary, from 25 clinical specimens collected from patients with cutaneous eruptions, 23 (92 %) strains were isolated and adapted in Hep-2 cell cultures by the analysis of their ECP. Out of the 23 isolates, 17 (74 %) were identified as HSV-1, 3 (13 %) as HSV-2 and 3 (13 %) could not be identified by PCR. Regarding to the susceptibility to ACV, from 11 isolates, 4 (36 %) were considered resistant and 7 (64 %) sensitive to the antiviral drug.

Keywords: Herpes simplex; isolation; cytophatic effect; acyclovir

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