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A Flow Cytometric Analysis of the Effects of Ganciclovir on the Expression of Cytomegalovirus (CMV) Immediate Early Antigen in Peripheral Blood Mononuclear Cells (PBMC) Obtained from Patients Suspected of CMV Related Disease. J. J. McSharry, D. Herman, D. Conti, N. Lempert and S. Remick. Albany Medical College, Albany, New York, USA.

With the advent of specific chemotherapy against CMV, there is a need for rapid, accurate diagnosis of CMV infection in transplant patients and AIDS patients suspected of CMV disease. To this end, we have used indirect immunofluorescence in conjunction with flow cytometry to detect and quantitate CMV in PBMC obtained from transplant patients and AIDS patients suspected of having CMV related disease. This sensitive, quantitative procedure takes only 10 hrs from the time the peripheral blood is received in the lab to the determination of the % CMV antigen positive PBMC. Methanol fixed PBMC were incubated with a monoclonal antibody to an immediate early CMV antigen for 2 hrs at 37°C, washed, and then incubated with FITC-conjugated goat anti-mouse IgG F(ab')₂ antibody for 2 hrs at 37°C. After two washes, the cells were treated with RNase followed by propidium iodide and analyzed for two-color fluorescence by flow cytometry. The data indicate that the percent of CMV antigen positive PBMC correlates with disease severity in transplant patients, but not in the AIDS patients where it may be predictive of future CMV disease. We are using this rapid, sensitive and quantitative technique to monitor the effect of ganciclovir on the expression of CMV-immediate early antigen in these patients. (Supported by NIH grant # AI-30883)

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Oral Ribavirin for the Prevention of Recurrences in Genital Herpes. Carvajal M.F.A., Palacio G.M.E., Garibay V.M. Civil Hospital, ISSSTEP, Puebla City, Mexico.

After a first phase treatment during which oral and topical Ribavirin was administered to treat recurrent genital herpes, patients began a second phase treatment in order to evaluate onset of recurrences of the illness, in a randomized, double blind, placebo-controlled study.

Thirty patients were randomly assigned to 2 treatment groups: Ribavirin (Rb) or Placebo (Pl). Treatment consisted on the administration of 2 Ribavirin (200 mg each) or placebo capsules daily for 12 months. Patients were seen monthly in order to receive their medication, or before in case of a recurrence. Ten total patients had a recurrence during the study period: 8 were from Pl group and 2 from Rb group ($p = 0.025$ Fisher's exact test).

In Rb group, the 2 patients were female, with a mean age of 29.5 years old and mean time for recurrence appearance was 6.5 months.

In Pl group, 6 patients were male and 2 female, with a mean age of 34.5 years old and mean time for recurrence appearance was 6.625 months.

Results show that Ribavirin by oral route may be effective in the prophylaxis of recurrences in genital herpes.