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ANTIHERPES EFFECT OF DEXTRAN SULPHATE COMBINED WITH ACYCLOVIR
IN VITRO AND IN VIVO.
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Highly sulphated dextrans have been reported to act sy-
nergistically with AZT against HIV /Ueno and Kuno, 1987/ and
simian type D retrovirus /Tsai et. al., 1990/ in vitro. Dextran
sulphate has been shown to be effective also in vivo on HSV-1
keratoconjunctivitis in rabbits /Pancheva, 1993/. We have now
investigated the combined antiviral effect of dextran sulpha-
te and acyclovir on the replication of HSV-1 and pseudorabies
virus in vitro and on experimental herpes simplex keratitis
in rabbits in vivo. Dextran sulphate in combination with ACV
results in synergistic effect, as measured by yield reduction
assay and on herpes simplex keratitis in rabbits. The better
therapeutic effect of the combination was proved by the de-
creased severity of ocular infection and the reduction of the
virus shedding in tear film.
Taking into consideration the effectivity of dextran
sulphate in the treatment of HSV-1 keratoconjuctivitis and the
emergence of ACV-resistant strains it seems worth futher ex-
ploring dextran sulphate and ACV combined chemotherapy of her-
pesvirus infections.

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2Effect of the gamma interferon (r) alone and in combination
2on 0 2the replication of the Human cytomegalovirus
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Gamma interferon (IFN) showed marked antiviral effect on
the replication of the human cytomegalovirus (HCMV).A 100 ul
of the gamma IFN required to inhibit HCMV replication at 2 lg
TCID50 infected dose (the same as the alpha2 IFN) and 500ul
at 4 lg TCID50 (twice less then alpha2 IFN) when interferons
were administrated before the infection.When the application
of the IFNs started after the infection the advantage of the
gamma IFN was more expressed.The combined administration of
the gamma IFN with acyclovir or gunciclovir showed a
synergistic effect even with low doses of the gamma IFN