INTERNATIONAL CLINICAL HYPERTERMIA SOCIETY

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PROGRAM AND ABSTRACTS
NEW CONCEPT ABOUT INHIBITION OF EXPERIMENTAL VIRAL INFECTIONS USING HYPERTERMIA


After refocusing the most accepted hypotheses regarding the site of action of hypertermia on the cellular level, the authors examine the validity of chemotherapy in certain infections diseases, especially in chronic viral diseases. Particularly, the chemotherapy is efficacious in the treatment of a large number of experimental infections induced by DNA and RNA viruses and it increases the cytotoxicity efficacy of some antiviral drugs.

Using chemotherapy on HSV-I and EMC viral cultures, it is possible to obtain a flow growth title of HSV-I and EMC viruses, proportionally to increase of temperature with a peak at 41-43°C. We can test some antiviral drugs, incorporating in normal cells and in infected cells by HSV-I and EMC, using hypertermia simultaneously.

So we can notice that the antiviral action of these drugs is facilitated by the simultaneous use of hypertermia, considering the viral growth title.

In conclusion, the chemotherapy controls the viral growth alone, but in association with antiviral drugs, the hypertermia increases its own action and it facilitates the penetration of these antiviral drugs within the infected cells too.