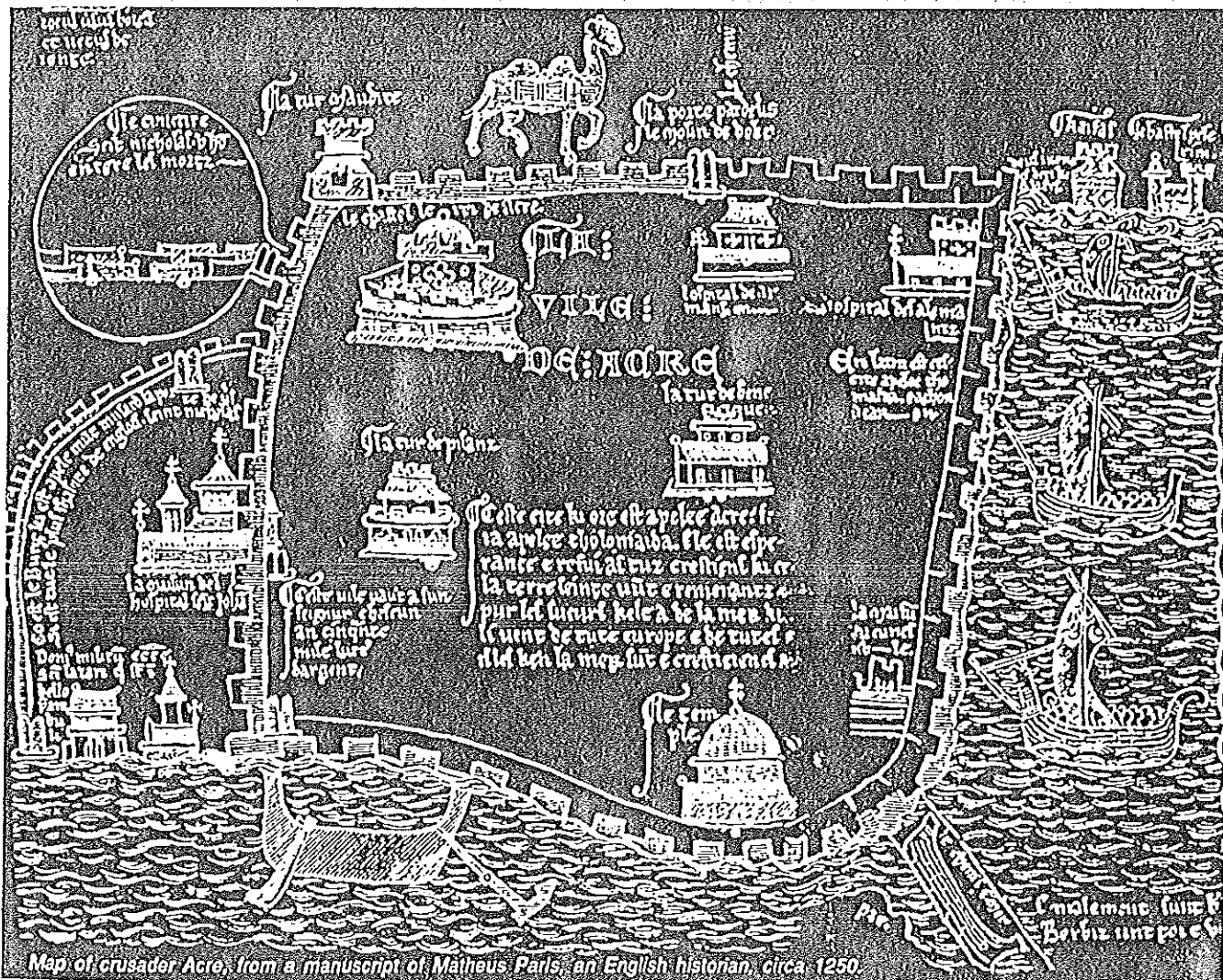


INTERNATIONAL CLINICAL HYPERTHERMIA SOCIETY THE 13TH INTERNATIONAL SYMPOSIUM ON CLINICAL HYPERTHERMIA

May 21-25, 1990, ACRE, ISRAEL



Map of crusader Acre, from a manuscript of Mathews Paris, an English historian, circa 1250.

PROGRAM AND ABSTRACTS

NEW CONCEPT ABOUT INHIBITION OF EXPERIMENTAL VIRAL INFECTIONS USING HYPERTHERMIA

Pigliucci G.M., Fiorito, R., Venditti, D., Iorio, B., Giudiceandrea, F., Cervelli, V., and Casciani, C.U.

After rediewing the most accepted hypotheses regarding the site of action of hyperthermia on the cellular level, the authors examine the validity of thermotherapy in certain infections diseases, especially in chronic viral diseases. Particularly the thermotherapy is efficacy in the treatment of a big number of experimental infections induced by DNA and RNA viruses and it increase the citotoxicity efficacy of some antiviral drugs.

Using thermotherapy on HSV-I and EMC viral cultures, it is possible 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 hyperthermia simultaneously.

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

In conclusion, the thermotherapy control the viral growth alone, but in association with antiviral drugs, the hyperthermia increase itself action and it facilitates the penetration of these antiviral drugs within the infected cells too.