

A STUDY EFFECTS OF RIBAVIRIN ON THE WHITE BLOOD CELL SYSTEM AND PLATELET IN PATIENTS WITH EPIDEMIC HEMORRHAGIC FEVER. Zhang Tian-ming¹, John W. Huggins², Hsiang Chin-min¹, Thomas M. Cosgriff², Joseph I. Smith², Niu Chun-sheng¹, 1 Virus Research Institute, Hubei Medical College, Hubei, Wuhan, China. 2 US Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, USA.

In a double-blind, placebo-controlled clinical trial of ribavirin therapeutic efficacy in the treatment of epidemic hemorrhagic fever (EHF), two hundred and forty-four cases of EHF were randomly divided into 2 groups; 126 cases were treated with ribavirin and 118 cases served as control. The white blood cell system and platelet count between ribavirin and placebo groups were compared with difference of stage, day, type. In the study group, the white blood cell and atype lymphocyte counts lowered, the platelet count were recovered much quicker. These results showed that ribavirin has ability of antiviral infections and definite effect in the treatment of EHF.

IMPROVEMENT OF SOME HEMATOLOGICAL PARAMETERS IN THE RIBAVIRIN TREATED EPIDEMIC HEMORRHAGIC FEVER PATIENTS IN HUBEI, CHINA. Tian-bin Xiang¹, Thomas M. Cosgriff², Chin-min Hsiang¹, 1 HUBEI MEDICAL COLLEGE; WUCHANG, HUBEI, CHINA; 2 US ARMY MED. RESEARCH INSTITUTE OF INFECTIOUS DISEASES, FT DETRICK, FREDERICK, MARYLAND, USA

Ribavirin is a broad spectrum antiviral agent. It has been proved that this agent can inhibit different DNA and RNA viruses in vitro and in vivo. There are some reports on the treatment of epidemic hemorrhagic fever patients with ribavirin in China, but no much data concern the hemostatic or hemorrhagic mechanisms. In a study of 187 cases of EHF patients by double blind random controlled method with ribavirin, 92 cases were identified as ribavirin treated group and 95 cases as placebo control group after the code was open. Plasminogen (PlG), antithrombin-111 (AT-111), fibrinogen platelet (PLAT) count and fibrin degradation product (FDP) were measured sequentially. The results showed that PlG, AT-111, PLAT and FDP showed a significant change in the treatment group. This effective change may be due to inhibiting virus multiplication, decreasing antigen stimulation to induce antibody production, decreasing antigen-antibody complex formation, so as to improve the patient conditions. The study results showed that ribavirin was valuable in the treatment of EHF patients.