Active immunization against hepatitis?

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had no antigen, and three had no elevated SGOT levels. One of the four had antigen present on only one day (the average duration may be many months), and one of the four had transaminase elevation on only one day," the investigator said.

"Under the conditions of this trial, at least, two inoculations (of the inactivated serum) seem to be immunogenic."

The children were residents of Willowbrook, a school for retarded children. Studies by the NYU group, confirmed by Dr. Prince's associates, indicate that children almost invariably are infected with both type A (infectious) and type B (serum) hepatitis within 6 to 12 months after entering such a school. (Hepatitis in children is a very mild disease, compared to the adult version.) Dr. Krugman stressed that the Willowbrook children were studied only after parental consent, and under carefully controlled clinical conditions.

When he learned of Dr. Prince's work with the high-titer gamma globulin, Dr. Krugman borrowed a sample for his experimental work with techniques of passive immunization.

"We felt that we should simulate the situation that occurs when [there is] an accidental inoculation of potentially contaminated blood," he said.

Fifteen children were administered 0.1 ml of a 1:10 solution of untreated serum hepatitis serum. Four hours later, 5 of the 15 children received standard, commercially available gamma globulin. The other ten received the special, high-titer gamma globulin.

Dr. Krugman described the results as "extraordinary findings."

"First, doing serial determinations for the presence of passive antibody following standard gamma globulin, we couldn't detect a thing. But when we tested for passively acquired antibody following the administration, 0.02 ml/pound of body weight, of the special gamma globulin, antibody was detectable as early as three hours after inoculation of gamma globulin, and it persisted for 8 to 29 days."

Three of the five children who received standard gamma globulin had evidence of antigen 43 and 57 days later. Three had evidence of elevated transaminase. This is a very small group, but the attack

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Red Cross tests donated blood for hepatitis

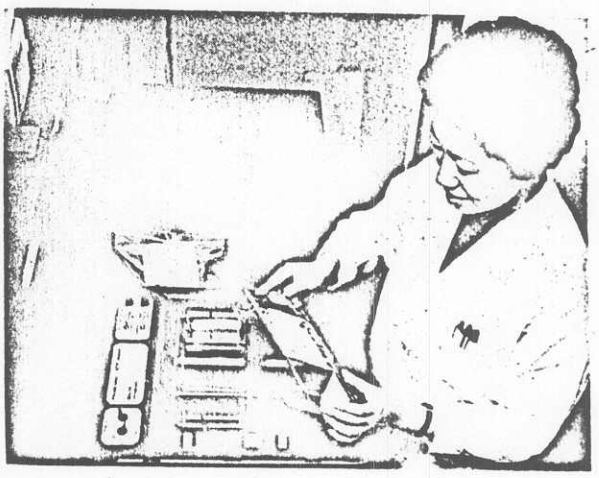
The Red Cross is starting to use a hepatitis screening test on all the blood it collects.

The counter electrophoresis technique will be used, based on a reagent (Hepatitis-Associated Antibody) recently licensed by the Division of Biologies Standards (*JAMA* MEDICAL NEWS 215:1570 [March 8] 1971).

The test, which takes about two hours to complete, is estimated to be 25% to 35% accurate. Sixty blood specimens may be tested at one time with the equipment to be used in the 59 Red Cross regional centers.

In addition, the Red Cross is beginning a nationwide donor registry at its computer center in Alexandria, Va, in an attempt to identify possible hepatitis carriers. In an unusual move, the agency also has authorized its chapters to cooperate in directing volunteer blood donors to non-profit blood banks—even in those areas not covered by Red Cross programs.

The three-part effort is an attempt to increase voluntary blood donations while reducing the incidence of hepatitis, said Tibor J. Greenwalt, MD, Red Cross medical director.



The new donor-recruiting efforts will involve many of the 1,600 Red Cross chapters which are not directly involved in the current Red Cross blood program.

The computerized hepatitis-carrier registry has been developing in the Detroit area since last year. It will be expanded to other areas, eventually becoming a nationwide system, a Red Cross spokesman said. The data will be available to other voluntary blood collection agencies, and the Red Cross, in turn, hopes to add information supplied by these groups.