Claims Gains In Hepatitis Vaccine Hunt

By WILLIAM RICE Science Writer

Two significant steps in the development of a vaccine against scrum hepatitis, a frequently fatal liver disease often spread by transfusion of contaminated blood, were claimed yesterday by Dr. Saul Krugman, virologist and chairman of pediatrics at New York University Medical Center.

Krugman, in a special honors program lecture at the center's Alumni Hall, 550 First Ave., said he and fellow scientists have developed a substance which in preliminary testing appears to offer some protection against the disease.

Virus Inactivated

While admitting that his data was based on a small number of patients, Krugman reported he apparently had been able to produce an immunization substance in which the virus was inactivated by boiling it. The substance, however, still stimulated production of protective antibodies against serum hepatitis.

He carefully pointed out, however, that this was only an early step toward a practical vaccine. He declined to predict how long it would take to create one, but said the development of other viral vaccines from this point took five to seven years.

Work on Gamma Globulin

Krugman also described work his team has done with a special type gamma globulin, a substance found in the blood which sometimes gives temporary immunity against viral diseases. It was prepared by the New York Blood Center from a person whose blood contained an especially large amount of serum hepatitis antibodies.

Krugman exposed 15 patients to serum hepatitis and, four hours later, gave five of them regular gamma globulin and the remaining 10 the special serum.

remaining 10 the special serum.

Of the five who received regular gamma globulin, three developed the disease. Of the 10 given the special serum, nine failed to develop signs of the disease. The 10th showed only through a blood test that he had reacted to the virus—without having any symptoms.

Retarded Are Patients

The studies were made on young patients at Willowbrook State School, a school for the mentally retarded on Staten Island. Hepatitis is said to be always present in such institutions, and the children, in whom the disease is mild, invariably catch it.

Krugman and his co-workers, after carefully explaining the work and receiving permission from the children's parents, isolated the youngsters as they were admitted to the institution.