An advance is reported in quest for serum hepatitis vaccine

Active immunization against serum hepatitis has been achieved by a group headed by Saul Krugman, MD, professor and chairman of the Department of Pediatrics at New York University Medical Center.

In addition, the investigators have developed a procedure to confer passive immunity from accidental serum hepatitis infection, using a new, high-titer gamma globulin developed by Alfred Prince, MD, and his associates at the New York Blood Center.

The studies are preliminary, but are considered a significant step toward developing a vaccine for control of type B viral hepatitis, or serum hepatitis.

Other members of the group include Joan P. Giles, MD, research associate professor of pediatrics at New York University, and Jack Hammond, MD, director of the Willowbrook State School on Staten Island, NY. The group has been studying hepatitis since 1956.

Earlier, the investigators had observed that boiling for one minute serum made from the MS-2 (serum hepatitis) strain of virus destroyed the infective qualities of the substance without affecting its properties as an antigen. Dr. Krugman used a recent Honors Program lecture at the NYU Medical Center to describe the results of the new studies that suggest serum hepatitis can be prevented by active and passive immunization.

In ten children who received one inoculation of the inactivated MS-2 serum (0.2 ml of a 1:10 dilution), six developed hepatitis-associated antigen (HAA) and five had elevated SGOT levels approximately four months later when they were given untreated MS-2 serum.

"But the interesting observation is that five children developed detectable antibody," said Dr. Krugman. In five of the six children, the antigen appeared on the 42nd day after the second injection; no antibody was found in the sixth child until the 56th day.

A second group of four children had even more encouraging responses, Dr. Krugman said. These four received a second dose of inactivated MS-2 serum approximately 4½ months after the first, then were challenged four months later with the regular serum.

"All four developed antibody, three of the four

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