

## MEDICINE

# Human Thrombin Recalled

Find that thrombin, blood-clotting substance, made from human blood was spreading the virus of a type of jaundice, so recall is issued.

► ALL THROMBIN made from human blood has been recalled from hospitals, doctors' offices and drug-distributing firms by the National Institutes of Health of the U. S. Public Health Service.

Reason for the recall is that it has been found spreading the virus of a kind of jaundice called serum hepatitis.

Thrombin is a natural blood-clotting or anti-bleeding substance in blood. It has been used to check bleeding during surgical operations, particularly operations on the brain such as removal of brain tumors where it is hard otherwise to control bleeding.

In Portland, Me., 14 cases of serum hepatitis have occurred during the past 10 months. In all of these the patients had undergone brain operations in which thrombin of human origin was used. The health officer in Portland reported this to the U. S. Public Health Service as soon as the pathologist, who had been making blood tests on the patients as they got sick, discovered the common factor responsible for all the cases.

Public Health Service officials subsequently have discovered that about a dozen cases of serum hepatitis following brain surgery in which human thrombin was used have occurred in recent months in two Boston hospitals.

The Boston and Portland cases are the first in which the connection between serum hepatitis and human thrombin has been made. Other cases, however, may have occurred without anyone noting the connection. It takes months, from 60 to 120

days, for serum hepatitis to develop after the virus has gotten into the patient's body. Consequently, it takes some medical detective work to discover in each case where the patient got the virus.

Cases of serum hepatitis in the past few years have been traced to blood and plasma transfusions and to hypodermic syringes which transferred the virus from one patient to another. Sterilizing the plasma by ultraviolet rays, required by the National Institutes of Health, is considered effective in killing the serum hepatitis virus.

Thrombin of bovine origin, from beef blood, is safe and has not been recalled, U. S. Public Health Service officials state.

Science News Letter, June 23, 1951

## TECHNOLOGY

## Bacon Now Cured in Two Days by Injection

► BACON CAN now be cured in two days, instead of the two to four weeks normally required. Injecting the bacon with the curing pickle is the new process.

Over 100 extremely fine stainless steel needles built into a fully automatic machine give bacon this quick cure, members of the Institute of Food Technologists were told at their meeting in New York. Kingan and Company, Indianapolis, Ind., developed the process and machine.

Each needle, through four small holes, delivers a measured amount of curing pickle to the bacon as it passes by the machine on a conveyor belt. Over 5,000 pounds of bacon

per hour can be pumped with this machine, using only two operators.

Curing time of hams and shoulders has been reduced from about 45 days to less than a week by pumping the curing solution into the arterial system, but bacon is not adapted to artery pumping. Now the quick-cured bacon can be ready for smoking 48 hours after the multiple injections. No puncture marks appear on the finished bacon.

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