Blood Transfusion Liability

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This paper is concerned with the causes of action available to the recipients of blood transfusions causing injury or death. Its scope is limited to cases where injury or death is caused by the blood itself, as where a transfusion is given with blood which is of the wrong type, or which is infected, or which is given to the wrong person.

The development of effective blood transfusion services is one of the major medical accomplishments of the past three decades. From a medical standpoint, the taking and transfusion of blood have evolved from difficult to relatively simple techniques. Today, blood transfusion is generally considered to be a safe medical technique. It has been estimated that over three million transfusions were given in 1952, and over four million in 1958. The enormous increase in the number of transfusions has carried with it an appreciably increased number of injuries. Recent estimates of the mortality rate in transfusions of blood range from .1% to .3%. Based on these estimates, between seventy and two hundred persons will die from blood transfusions in the Cleveland area alone in 1961.

There are two major types of transfusion injuries: reactions due to incompatible blood, and transmission of diseases through a blood or plasma transfusion. Most commonly, actions for death or injury from transfusions have been based upon the theory of negligence. It appears that the general principles and rules applicable to negligence actions also apply in actions arising from transfusions where liability is based on negligence.

* B.A., Baldwin-Wallace College; Third-Year student at Cleveland-Marshall Law School.

1 Moore, Medical Problems Created by a National Blood Program, 149 J. A. M. A. 18 (1952); and see the American National Red Cross pamphlet on their blood program. The Red Cross collected and distributed 18,182,905 pints of blood from January 1948 to June 1949 for civilian use alone. Ohio's 193 hospitals received 141,997 pints of whole blood during 1959. Of this total 71,612 pints were supplied to hospitals in Cleveland. Only four of Cleveland's hospitals get all their blood from the Red Cross.

I. Tranfusion Of Incompatible Blood

Mistyping

The importance of accuracy in blood transfusion, and the results of mistakes in testing, are so well known that anyone concerned with the transfusion of blood is legally held to have such knowledge and to be responsible for any damage resulting from any deviation from the basic rules. Mistakes in the typing, labeling, cross matching, and administration of blood will not be excused in the eyes of the law. The generalness of use and knowledge of the accepted procedures leaves no reason for a margin of error.

In the leading case of Berg v. New Society for the Ruptured and Crippled, the plaintiff, suffering from rheumatoid arthritis, entered the defendant's hospital for a course of treatment that included the administration of 500cc of blood. Prior to the performance of the transfusion, a sample of her blood was sent to the hospital's laboratory for analysis. The technician who tested it reported that Mrs. Berg's blood was type A, RH positive. She was transfused with RH positive, but the transfusion was stopped when she started to develop an unfavorable reaction. A few months after she was discharged from the hospital she became pregnant, and was directed by her family physician to a laboratory for the purpose of determining her blood type and RH factor. It was discovered that she was type A, RH negative and not RH positive.

During the course of Mrs. Berg's pregnancy, it was established that the fetus was RH positive, since her titer index rose substantially. She was advised that this increased titer would in all probability be fatal to the fetus. Relying on the doctrine of respondeat superior, the woman sued the hospital for the negligence of the technician.

Before reviewing the lower court's finding of negligence the New York Court of Appeals was faced with what has been termed the "medical-administrative" issue. The New York Courts had for years applied the rule that a hospital is liable for the negligent acts of its employees only if the act was "administrative." The court modified the doctrine by holding that even though the technician's act was "medical," the technician

was not a "professional" person, and that therefore the hospital was liable for her negligent act.⁴

The second issue in the Berg case was the determination of whether or not the failure to accurately test for the blood factor constituted negligence. The Court of Appeals sustained the trial court finding that the error of incorrectly determining the plaintiff's RH factor was negligent. In evaluating whether or not the court was correct in sustaining this finding, some familiarity with testing for blood factors is necessary. However, the discussion will not be limited to the testing for RH factors, nor will it be limited to testing by hospitals.

Hospitals and blood banks do not routinely test for all the blood factors.⁵ They do type both the donor's and recipient's blood for the A-B-O system and the RH factor. Because incompatibility due to the A-B-O system or the RH factor is responsible for almost all transfusion injuries, and since it is standard practice to test for these factors, proof of failure to do so should sustain a finding of negligence. In the instant case, the error was not in failure to test but in failure to test accurately. Here, liability is not as clear as in failure to test. Weak anti-serum, used through no fault of the person testing, may result in inaccurate testing.⁶

If the donor's blood is RH positive, no further tests are made, but when the blood is RH negative, there is some difference of professional opinion as to whether or not further tests with anti-RH (c) and anti-RH (e) need be made.⁷ Due care would appear to require that any donor's blood found negative as to RH (o) should be tested with anti-RH (c) and anti-RH (e) serums.

Hemolytic reaction may also result from incompatibility as to the M-N factors, the Kell factor, the Duffy factor, and others.

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⁴ New York later abolished the medical-administrative rule, and all charitable immunity, stating that hospitals should bear the same burden as anyone else under the ordinary rules of respondeat superior. A roll call of state and territorial courts today on the question of charitable immunity for hospitals would show that about half of them grant immunity and half deny immunity. See, for example, Pierce v. Yakima Valley Memorial Hospital Ass'n., 260 P. 2d 765 (Wash., 1953). Ohio denied immunity in Avellone v. St. John's Hospital, 135 N. E. 2d 410 (Ohio, 1956).

⁵ Wiener, Grant, Unger and Workman, Medicolegal Aspects of Blood Transfusions, 151 J. A. M. A. 1435 (1953).

⁶ The hospital, however, may detect weak anti-serum by use of proper controls on serum activity.

These factors, however, are not routinely tested for in donor’s blood because they are seldom the bases for a reaction. To require that hospitals and blood banks test donors’ blood for each and every one of these newer and less common factors would impose an overwhelming burden on them.

Mislabeling

In *Mississippi Baptist Hospital v. Holmes*, the hospital technician mixed up the decedent’s blood sample with the blood sample of another patient on the same floor. Thereupon, he accurately typed both samples but mislabeled each sample as result of his original error. As a result, the decedent, while undergoing surgery, was transfused incompatible blood and died. The Supreme Court of Mississippi, overruling the state’s charitable immunity doctrine, held the hospital liable in damages for the negligence of its technician. The same result was reached in *National Homeopathic Hospital v. Phillips*. In an action to recover for wrongful death caused by transfusion of incompatible blood erroneously tested, the hospital was held liable for negligence of a technician.

*Necolayff v. Genesee Hospital* presented another type of error. A nurse and an intern entered the wrong room and gave a woman patient a transfusion despite her protests that the blood was not intended for her. In fact the blood was for another patient, and as a result the plaintiff became seriously ill and temporarily insane. The court held that giving a transfusion to the wrong patient was negligence, and held the hospital liable despite the immunity granted to hospitals for “medical” acts that existed at that time.

There are many additional errors that may cause injury. For example, the serums used to type or crossmatch the blood samples may be interchanged; patients with similar names may each be given blood intended for the other; or there may be an error in reading the labels accurately. That such instances present real dangers is attested to by recent articles from the medi-

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9 214 Miss. 906, 55 S. 2d 142 (1951).
12 Ibid; and see note 4, supra.
cal profession itself warning against "loose" practices within the profession.\textsuperscript{13} The essence of their criticism is that the technique has become so routine that many physicians have a tendency to disregard the inherent dangers that accompany blood transfusions. Many of the accidents that have occurred are directly attributable to untrained interns and to physicians who perform these tests at night or on holidays, in the absence of regularly assigned technicians. Be this as it may, human error, and proof of such error with a showing that the error caused injury to a patient, should be sufficient to sustain a finding of negligence.

II. Transmission Of Disease

There are several diseases that one human can transmit to another through a transfusion of whole blood or pooled blood plasma. The viruses or organisms of such diseases may be carried in the donor's blood and may pass with the blood to enter the blood stream of the recipient. Three diseases which may present this problem are homologous serum hepatitis, malaria, and syphilis.\textsuperscript{14} Of these three, the transmission of homologous serum hepatitis occurs most frequently, and because the resulting illness is serious and sometimes fatal, this problem is an important one in the field of blood and plasma transfusions.

Homologous Serum Hepatitis

Hepatitis is an inflammation of the liver. Homologous serum hepatitis is a form of viral hepatitis transmitted by the injection of human blood or blood products contaminated with the causative agent.\textsuperscript{15} The terms "homologous serum jaundice" and "transfusion jaundice" are also used to describe this type of hepatitis.

The virus of homologous serum hepatitis cannot be detected in donors by any known medical test. Neither can the virus be detected in the blood of the donor when taken or in pooled blood


\textsuperscript{14} Other diseases might be transmitted through a blood or plasma transfusion; for example: respiratory infection, brucellosis, measles, allergic states, and influenza. See Wiener, Grant, Unger, and Workman, supra, note 5, at 1438.

\textsuperscript{15} Blakiston, Medical Dictionary 541 (2d ed. 1956).
plasma. This dilemma has been a subject of medical concern for many years, and a number of persons have been injured as a result of the transmission of this hidden virus. While the possibility of transmission of homologous serum hepatitis in whole blood is quite slim, the possibility of transmission in pooled blood plasma is multiplied by the number of units making the pool, for a virus from a single donor can contaminate the entire pool of blood plasma, rendering every transfusion from such a pool highly dangerous.\textsuperscript{16}

In \textit{Parker v. State},\textsuperscript{17} the patient was given a transfusion of pooled plasma which, unknown to those giving it, contained the hepatitis virus. As a result the patient died. The decedent’s administrator brought an action for negligence against the State (as distributor of the plasma) on the ground that the State should have warned the physicians of the danger of the hepatitis virus. The court affirmed a dismissal of the action on the ground that it was reasonable for the State to expect that any authorized person using the plasma would know of the danger.

In \textit{Hiddy v. State},\textsuperscript{18} the decedent had been in the hospital fifteen hours prior to his operation, no blood typing tests had been made, and there were ample supplies of whole blood available for transfusion. The court again ruled that the State, as distributor of the plasma, was not negligent. The court stated that the only way the State could prevent this type of injury would be to recall all the pooled blood plasma, but that this was highly undesirable because pooled blood plasma has many advantages notwithstanding its dangers. The court, however, clearly implied that the physician might have been negligent in making his decision to use plasma rather than whole blood, especially in the absence of an emergency.

A second basis of liability was tried in \textit{Merck & Co. & Kidd}.\textsuperscript{19} The plaintiff, injured due to transmission of homologous serum hepatitis, argued that the use of the plasma containing the hepatitis virus violated the Tennessee Food, Drug and Cosmetic Act, thus constituting negligence per se. The court, after pointing out the medical impossibility of detecting or destroying this virus,

\textsuperscript{16} Murphy and Workman, Serum Hepatitis from Pooled Irradiated Dried Plasma, 152 J. A. M. A. 1421 (1953).
\textsuperscript{17} 280 App. Div. 157, 112 N. Y. S. 2d 695 (3d Dep’t 1952).
\textsuperscript{19} 242 F. 2d 592 (6th Cir., 1957), cert. denied, 78 S. Ct. 15 (1957).
held that the virus was not a "filthy" substance within the "intendement" of the statute.

It would appear that this decision rests upon very unsound ground since the court appeared to place great emphasis on the fact that there was no scientific way to detect or destroy the virus of homologous serum hepatitis. This, however, is not true, for it has been known for several years that the virus in pooled blood can be totally destroyed by a process of storing the plasma at room temperature for six and perhaps as few as three months. This process is now widely known among persons dealing with plasma preparations, and is not a burdensome, expensive or impractical requirement to utilize.²⁰

However, this virus-destroying process is not effective for whole blood. The only safeguard available here is stringent donor requirements. Careful screening and questioning of donors may, to a limited degree, lessen the risk. However, a healthy person who gives no history of hepatitis or jaundice and no clinical evidence of liver disease may nevertheless carry the virus of hepatitis.

_Malaria_

There are no reported legal actions based on contraction of malaria through a transfusion. This probably stems from the fact that the only way to test blood for this disease is so impracticable as to exclude its general use. Here, liability will probably be limited to failure to ask questions of prospective donors regarding malaria.

_Syphilis_

The chilling of blood effectively destroys the syphilis agent in blood. Therefore, failure to chill the blood, resulting in transmission of syphilis, should in the absence of an emergency, constitute negligence on the part of the supplier. _Giamboze v. Peters_²¹ is the only reported case based on negligent transmission of syphilis. This was a malpractice action against a physician who failed to test the donor's blood for syphilis. The court held that the negligence action was barred by a two year statute of limitations.

²⁰ Note, Pooled Plasma with Little or No Risk of Homologous Serum Jaundice, 154 J. A. M. A. 801 (1953).
²¹ 127 Conn. 380, 16 A. 2d 833 (1940).
Warranty and Strict Liability

Due to the fact that the transmission of the hepatitis virus in whole blood may occur without negligence, as was pointed out earlier, plaintiffs have resorted to the breach of implied warranty theory as a basis for recovery. There is no reported case where recovery has been allowed on this theory. The courts have pointed out the lack of means of detecting or destroying the virus, and referred to the undesirability of making hospitals insurers of the products they administer.

22 Perlmutter v. Beth David Hospital, 308 N. Y. 100, 123 N. E. 2d 792 (1954).