Mercer Law Review

Volume 1 | Number 2 Article 7

5-1950

Blood Will Tell

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COMMENTS

"BLOOD WILL TELL!"

One of the most vexing problems which has confronted the legal world is the accurate determination of parentage. This problem arises frequently in actions for non-support, in bastardy and probate proceedings and in prosecutions for fornication, rape and seduction.

Although the traditional method of proving or disproving parentage has proved nothing but its own inadequacy, it has remained comparatively unchanged for centuries. Even if one can prove or disprove sexual relations near the time of conception, such fact is inconclusive of paternity. In the first place, the time of conception cannot be accurately computed. Then, there is the difficulty of actually proving or disproving the alleged sexual relations. Because of the very nature of the act there are seldom witnesses. Usually, only opportunity and desire are capable of determination. Thus, it can be seen that a man who is charged with being the father of a certain child has but little to offer in his defense. It has been often said that this charge is one of the easiest to make, and one of the hardest to disprove. The puntative parent can deny sexual relations, of course, but if he has had social relations with the woman, opportunity has been afforded; and juries will infer desire from the scantiest of evidence. The issue in most cases ultimately boils down to the man's word against that of the woman—and juries, for reasons of sympathy and public policy, are more apt to side with the woman.

Proceedings involving identity are quite often as perplexing as those concerning paternity. For example, take the case of a missing heir with a claim to an inheritance. Unless he possesses definite identifying characteristics of some kind, it is difficult to prove his true identity.

Science, however, has demonstrated that many filial con-

troversities can be solved with absolute certainty through the use of *blood grouping tests*.[1] Such tests can conclusively indicate every instance in which the putative parent *cannot* be the real one.[2] As yet, they offer no affirmative proof of parentage, but in 55% of all cases in which the putative parent *is not* the real one, they can conclusively demonstrate that fact.[3] Such an accomplishment, testimonial evidence—confusing, vindictive and recriminating—cannot effect. At its best, it can only prove intimacy, *not paternity*. For a better understanding of the forensic value of blood grouping tests, it is necessary to know of their scientific aspect.

NATURE OF THE TESTS

The medical hypothesis behind blood grouping tests is based upon the presence or absence of certain substances in the red blood cells. Dr. Karl Landsteiner[4] discovered, in 1900, that the red corpuscles from the blood of one person would not, in every instance, mix with the serum from the blood of others, but would often clump together (agglutinate). By studying this aggultination, or lack of agglutination, upon the mixture of known bloods with unknown ones, he was enabled to classify all blood on the basis of the presence of agglutinogens "A" or "B" as Group A, Group B, Group AB (containing both factors), or Group O (containing neither factor).[5]

1. For a comprehensive study of all phases of blood grouping, see SCHATKIN, DISPUTED PATERNITY PROCEEDINGS (2d ed. 1947).
2. Comment, *"A Trial of Bastardy Is a Trial of the Blood,"* 34 CORNELL L.Q. 72 (1948); Comment, *Blood Grouping Tests and the Law of Evidence*, 19 ROCKY MT. L. REV. 169, 171 (1947); Note, 23 N.Y.U.L.Q. REV. 156, 159 (1948); also see Weiner, *Determination of Non-Paternity*, 186 AM. J. MED. SCI. 257 (1933).
3. Comment, *"A Trial of Bastardy Is a Trial of the Blood,"* 34 CORNELL L.Q. 72, 75 (1948); Note, 23 N.Y.L.Q. REV. 156, 159 (1948).
4. Awarded Nobel Prize, Medicine, 1930.
5. Blood groups may be determined from blood, mucous, saliva or semen. Comment, *Admissibility of Blood-Group Test*, 32 MICH. L. REV. 987, 989 (1934), citing LATTIES, INDIVIDUALITY OF THE BLOOD 277 (1932). See 1 WIGMORE, EVIDENCE §§ 165a, 165b (3rd ed. 1940) for a full discussion of the scientific aspect of blood grouping.

Important consequences follow from the recognition of this diversity in the composition of blood. By ascertaining the blood groups of a child and his known parent, it is possible to determine the blood group or groups into which the blood of the unknown parent *must* fall, and also those into which it *cannot* fall.[6]

Child	Known Parent	Unknown Parent Must Be	Unknown Parent Cannot Be
O	O	O,A,B	AB
	A	O,A,B	AB
	B	O,A,B	AB
	AB	Impossible for parent to be AB when child is in O	
A	O	A,AB	B,O
	A	O,AB,A,B	Exclusion impossible
	B	A,AB	B,O
	AB	O,AB,A,B	Exclusion impossible
B	O	B,AB	A,O
	A	B,AB	A,O
	B	O,AB,A,B	Exclusion impossible
	AB	O,AB,A,B	Exclusion impossible
AB	O	Impossible for parent to be O when child is in AB	
	A	B,AB	A,O
	B	A,AB	B,O
	AB	A,AB,B	O

The legal significance of blood grouping tests can readily be deduced from the above chart. For example, suppose that M, the mother of C, accuses X of being the father of her child. C has Group A blood, and M Group O blood. The father must, of necessity, have either A or AB blood. Upon examination, however, it is discovered that X's blood falls within Group O. Clearly, X *cannot* be the father. If, instead, X's blood group was A (or AB), it could be established that he *might* be the father.[7] The test, however, can-

6. The writer developed the following chart from those presented by Weiner, *Determination of Non-Paternity*, 186 AM. J. MED. SCI. 257 (1933).

7. It has been estimated that 45% of the male population in the United States has Group O blood, 42% Group A blood, 10% Group B blood, and 3% Group AB blood. Hooker and Boyd, *The Chances of Establishing Non-Paternity by Determination of Blood Groups*, 16 J. OF IMMUNOLOGY 451, 452 (1929).

not prove that he (or anyone else) *is* the father, since there are millions of men whose blood group is A, any one of whom—at least theoretically—might be the father. Consequently, the test has probative value only when its results negative parentage. Nevertheless, by such exclusionary method alone, an innocent defendant is afforded one chance in six of conclusive vindication.[8]

In 1927, Dr. Landstiner and Dr. Philip Levine discovered two new substances, agglutinogens "M" and "N." It was thus revealed that everyone has not only a blood group but also a blood type (M, N, or MN, depending upon which factor or factors he possesses). From the results of experiments similar to those obtained with the A and B agglutinogens, it was found (1) that unless present in the blood of one or both of his parents, neither the M nor the N factor can appear in the blood of a child, (2) that a Type M parent cannot have a Type N child, and (3) that a Type N parent cannot have a Type M child.[9] As with the A-B-O test; the M-N test cannot establish parentage in any given case, nor can it establish non-parentage in all cases. But, with the revelation of this test, the chances of exonerating an innocent putative parent were raised from one in six to one in three.[10]

Another blood characteristic—the rhesus factor—was found in 1940. Blood was once again classified, this time into twelve RH-hr types. Exclusionary laws, similar in principle to those relating to the A-B-O and M-N tests, were formulated.[11] By utilizing this test, in conjunction with the other two tests, the chances of exclusion were raised to more than one out of two.[12]

8. Flacks, *Evidential Value of Blood Tests to Prove Non-Paternity*, 21 A.B.A.J. 680, 683 (1935).
9. Vogelhut, *Forensic Applications and Evidential Value of the Blood Group Tests*, 6 DETROIT L. REV. 101 (1936). See Hooker and Boyd, *Blood Grouping as a Test of Non-Paternity*, 25 J. CRIM. L. 187, 194 (1934) for the standard M-N blood group chart.
10. Flacks, *supra* note 8.
11. RH-hr charts, similar to the A-B-O and M-N tables, have been prepared for medicolegal use. Comment, *"A Trial of Bastardy Is a Trial of the Blood,"* 34 CORNELL L.Q. 72, 74-75 (1948).
12. *Id.* at 75.

In 1949, Dr. Levine announced the discovery of a fourth blood test, based upon an agglutinogen closely akin to the rhesus factor.[13] Although it is not yet known how this new factor will fit into the pattern of tests now recognized, the supposition is that it will increase the probability of proving non-parentage, because as each additional blood characteristic is brought to light, the possibility of the real parent's blood falling within the same category as that of the innocent putative parent is sharply decreased.

From the above data, it may be concluded with certainty:

(1) that by ascertaining the blood group, or one of the blood types, of each of the parties, i.e., the known parent, the child and the putative parent, either one of two facts can be positively determined: (a) the putative parent *might* be the real parent, or (b) he *cannot* be the real parent; and

(2) that by administering all three of the proven tests, an innocent putative parent is afforded better than a 50-50 chance of conclusively establishing his innocence.

Reception of the Tests by the Courts

For many years blood grouping results have been unanimously accepted by medical authorities as conclusive of non-parentage,[14] and practically every European court has taken judicial notice of this fact.[15] Nevertheless, the majority of American courts, in the absence of statute, refuse even to admit such serologic evidence, and, where they admit it, refuse to hold it conclusive.[16] Several grounds have been offered for this refusal, all of which are unsound.

Danger of Error in Conduct of Tests.—Part of the reluctance on the part of our courts to recognize the efficacy of blood grouping tests has been attributed to the danger of error in analyzing the blood of the parties.[17] This objec-

13. The Atlanta Constitution, May 6, 1949, p. 16, col. 1.
14. Flacks, *The Forensic Value of Blood Tests in Evidence: A Review*, 23 A.B.A.J. 472 (1937).
15. Schoch, *Determination of Paternity by Blood-Grouping Tests: The European Experience*, 16 So. Calif. L. Rev. 177 (1943).
16. Britt, *Blood-Grouping Tests and the Law: The Problem of "Cultural Lag,"* 21 Minn. L. Rev. 671, 679-691 (1937).
17. Berry v. Chaplin, 74 Cal. App. 2d 652, 169 P.2d 442 (1946).

tion, however, cannot be sustained in the light of experience. First, the performance of the tests is relatively simple. Several drops of blood are extracted from the fingertips or earlobes of the subjects and placed in a sterile test tube. Then, either one of two things takes place: agglutination occurs, or it does not occur—there can be no "half-way" response. Secondly, such tests are not at all uncommon; they are carried out every day in practically every medical laboratory in the world. Thirdly, blood grouping technicians are accustomed to accuracy in their work, since they are constantly typing blood transfusions. If a Group A donor were allowed to give blood to a Group B recipient, agglutination would occur in the blood stream of the latter and death would result almost immediately. If medical science is thus willing to risk human life upon the accuracy of blood grouping determinations, the possibility of error must be negligible. All our courts should recognize this fact; for, as compared with the susceptibility of juries to error, the slight risk involved in admitting blood grouping results in evidence is more than justified.

Privilege Against Self-Incrimination.—It has been argued that to require a criminal defendant to submit himself to blood grouping tests would be to violate his constitutional privilege against self-incrimination.[18] Mr. Justice Holmes, in *Holt v. United States*,[19] answered this argument when he declared that "the prohibition of compelling a man . . . to be a witness against himself is a prohibition to the use of physical compulsion to extort a communication from him, *not an exclusion of his body as evidence* when it may be material." [Italics supplied.] Typing the blood of a person has no more relation to a verbal admission of guilt than does scrutinizing his face or fingerprints, which is permitted by every court. And it is unduly presumptious to suppose that the privilege against self-incrimination will ever be so construed as to prohibit the same. Making blood grouping determinations, where they are relevant in a crim-

18. Shanks v. State, 185 Md. 437, 45 A.2d 85 (1945).
19. 218 U.S. 255, 31 S. Ct. 2, 54 L. Ed. 1021 (1910).

inal proceeding, is objective investigation of the most reliable sort.

Invasion of Privacy.—The objection has been raised that to require a party or other witness to a proceeding to expose himself to blood grouping tests is an unconstitutional invasion of his right to privacy.[20] This contention is obviously without merit. There is no constitutional guarantee of a right to privacy.[21] The courts have frequently jailed witnesses whose flight was feared, ordered physical examinations in personal injury actions, and required sensitivity tests to be made when paralysis was alleged.[22] Consequently, "if for the purposes of judicial inquiry a witness may be put in prison . . . or required . . . to exhibit a wound or disfigurement of the body to the jury, surely a specimen drop of blood may also be required. The greater must include the less."[23]

Other Objections.—The claim has been asserted that blood grouping tests are of negative force and application. This is certainly true, but it should be no bar to their admissibility. Alibi evidence is of similar character and is not even suceptible of the same probative evaluation as blood grouping results. The tests have also been criticized on the ground that the ". . . majority of applications for orders of affiliation are made by poor persons against poor persons, and the money for elaborate laboratory work and expert [testimony] upon its results is not there."[24] Investigation, however, has revealed that this objection is baseless. All three of the tests can be made for as little as ten to fifteen dollars, and the laboratory of almost any large hospital is equipped to make them. Secondly, there is no need

20. Bednarik v. Bednarik, 18 N.J. Misc. 633, 16 A.2d 80 (Ch. 1940). Criticized in Schatkin, *Paternity Blood Grouping Tests: Recent Setbacks*, 32 J. CRIM. L. AND CRIMINOLOGY 458 (1941).
21. The Fourth Amendment to the Constitution of the United States does not include a right of personal privacy.
22. Britt, *supra* note 16, at 694.
23. Lee, *Blood Tests for Paternity*, 12 A.B.A.J. 441, 442 (1926).
24. Britt, *supra* note 16, at 694, quoting from Comment, 48 JUST. PEACE & LOC. GOV. REV. 353 (1934).

to tie up expert witnesses in order that they might testify in respect to their findings. Such extra expense can be avoided by merely requiring that an affidavit be procured as to the test results. Furthermore, an innocent putative parent, regardless of his financial status, would surely prefer to pay whatever the blood grouping tests and expert testimony cost rather than take the chance of having a plaintiff-minded jury find him guilty of rape, fornication, bastardy or seduction.

The inevitable conclusion to be drawn from the attitude of the courts is that without statutes providing for the admissibility of blood grouping results, our courts will continue to rely on perjured testimony and prejudiced juries for a determination of filial controversies. And the truth as evidenced by scientifically proven *facts* may forever remain hidden from justice.

Evidentiary Weight Accorded the Test Results

Less than fifteen years ago, New York enacted the nation's first blood grouping statute.[25] Since then, seven other states have passed similar acts, all of which provide for the admission of blood grouping results where conclusive of non-parentage.[26] Not one of these statutes, however, makes

25. N.Y. Civ. Prac. Act. § 306a (1935) provides: "Whenever it shall be relevant to the prosecution or defense of an action, or whenever it shall be relevant in any proceeding pending in a court of record, the court, by order, shall direct any party to the action or proceeding, and the child of any such party and the person involved in the controversy to submit to one or more blood grouping tests, the specimens for the purpose to be collected and the tests to be made by duly qualified physicians and under such restrictions and directions, as to the court or judge shall seem proper. Whenever such test is ordered and made, the results thereof shall be receivable in evidence only where definite exclusion is established. The order for such blood grouping test may also direct that the testimony of such experts and of the persons so examined may be taken by deposition pursuant to this article."

26. Maine, Me. Rev. Stat. c. 153 § 34 (1944); Maryland, Md. Ann. Code Gen. Laws art. 12 § 17 (Flack, Supp. 1943); New Jersey, N.J. Stat. Ann. § 2:99-3,4 (Supp. 1946); North Carolina, N.C. Gen. Stat. § 49-7 (Michie, et al., Supp. 1945); Ohio, Ohio Gen. Code Ann. § 12122-1,2 (Page, Supp. 1946); South Dakota, S.D. Code § 36.0602 (1939); Wisconsin, Wis. Stat. §§ 166.105, 325.23 (Brossard, 1943).

any provision for the evidentiary weight to be accorded the results once admitted. Presumably, the legislatures assumed that once it became mandatory upon the courts to admit blood grouping results "where definite exclusion is established" the courts would give them decisive weight. Such assumption (if, in fact, one ever existed) has long since been proved fallacious. Within the last ten years, eight courts in New York alone have refused to accord finality to blood grouping evidence,[27] and only one court in the entire country has regarded them as conclusive in every case.[28] This overwhelming disregard of *fact* is appalling. In effect, the courts are conceding the reliability of blood grouping tests on the one hand and allowing juries to find against them on the other. A typical example of such contrariety may be found in the case of *Berry v. Chaplin*.[29] There, the court allowed the jury to give the same consideration to testimony and other evidence as it did to exclusionary blood grouping results. The appellate court, although recognizing the anomaly of the situation, nevertheless refused to reverse the trial court's decision on the ground that "such tests and the evidence thereof are not conclusive *because not so declared by the Code.*" [Italics supplied.] As a consequence, Charlie Chaplin is supporting another man's child today.

The *Chaplin* case is obviously wrong. Still worse, its ruling has influenced courts in other states.[30] Exclusionary blood grouping results, like fingerprints and ballistics, are not opinion evidence. They are scientifically proven *facts* and have no place in a jury room. A jury finding in contradiction to them is equivalent to a jury ruling that "black is white, two and two are five and up is down."[31] Nevertheless, the majority of those courts which even admit blood

27. Schatkin, *Paternity Blood Grouping Tests: Recent Setbacks*, 32 J. CRIM. L. & CRIMINOLOGY 458 (1941).
28. Court of Special Sessions, New York, N. Y. Comment, *"A Trial of Bastardy Is a Trial of the Blood,"* 34 CORNELL L.Q. 72, 78 (1948).
29. 74 Cal. App. 2d 652, 169 P.2d 442.
30. *See* Jordan v. Davis, ... Me. ....., 57 A.2d 209 (1948).
31. Boston Herald, Apr. 19, 1945, p. 20, col. 2.

grouping results continue to reject them as conclusive of non-parentage. In view of this fact, it is time that the legislatures awaken to the forensic value of exclusionary blood grouping evidence and enact statutes, not only to require its admission in evidence, but also to compel the courts to accord it conclusiveness.

Proposed Blood Grouping Test Act

There follows a suggested legislative enactment which will greatly diminish the confusion on the part of the courts in respect to blood grouping evidence. The most significant provision of this Act is "Section 4," which expressly provides for the evidentiay weight to be accorded blood grouping results. Without such a provision there can be no assurance that the courts will abandon their skepticism and accept blood test exclusions for their true worth.

Model Blood Grouping Act

Title. An Act to admit serologic blood grouping test results in evidence in filial controversies where such evidence establishes non-parentage; to make such results, where admitted, conclusive evidence of non-parentage; to confer power upon the courts to direct any person to submit to blood grouping tests, to appoint and direct blood grouping experts, to allow the testimony of such experts to be taken by deposition, to find any person who refuses to submit to such tests in contempt of court, and to determine how and by whom the costs of such tests shall be paid; to repeal all laws in conflict herewith; and for other purposes.

Preamble. Whereas, there exists in the State of ----------a situation detrimental to the sound social order thereof; and

Whereas, such situation consists of the use by the courts of outmoded and inadequate methods in the determination of issues involving parentage; and

Whereas, the solution of filial controversies is peculiarly within the realm of medical science; and

Whereas this body feels that an adequate scientific remedy is now available to diminish the evils of the aforementioned situation; and

Whereas, such remedy consists of the admission of serologic blood grouping results in evidence; and

Whereas, many courts have refused to admit such serologic evidence; and

Whereas, such refusal, in general, has resulted from the lack of statutory authorization; and

Whereas, it is the policy of this State to promote the public welfare and to assist its courts in the administration of justice; and

Whereas, this body deems it necessary, in the furtherance of such policy, to require the admission of serologic blood grouping results in eviedence where such results negative all possibility of parentage; therefore

Enacting Clause. Be it enacted by the General Assembly of_____, and it is hereby enacted by the authority of the same as follows:

Short Title. Section 1. *Short Title*: This Act shall be known and may be cited as "The Blood Grouping Test Act."

Definition Clause. Section 2. *Definitions*: When used in any part of this Act, the following

words, terms and phrases and any variations thereof required by the context shall have the meaning ascribed to them in this section except where the context clearly indicates a different meaning:

a. "blood grouping tests" means and includes such serologic tests as are generally recognized and approved by medical science as adequate to determine the blood group or the blood type of a human being, i.e., the A-B-O test, the M-N test and the RH-hr test, and any and all similar tests which may be subsequently discovered and approved.

b. "duly qualified expert" means and includes any person with adequate scientific training, such as is symbolized by the degree of Ph.D., Sc.D., M.D., or equivalent, who has performed blood grouping tests and has conducted research in serology as applied to human blood, and who has been certified by the Chief Administrative Officer of the State Health Department as competent to perform such tests. The essential requisite is not the possession of academic degrees, but a familiarity with the subject.

Mandatory to Order Tests.

Section 3. Whenever it is relevant in any judicial proceeding to determine the parentage of any person, the court, on motion of a party to the proceeding, shall direct any person or persons to submit to one or more blood grouping tests.

Admissibility of Test Results.

Section 4. Whenever such tests are ordered and made, the results thereof shall be received in evidence, but only

where the possibility of the putative parent being the real parent is definitely excluded thereby.

Weight Accorded Test Results. Section 5. Whenever blood grouping results are admitted by the court, they shall be held conclusive evidence of non-parentage.

Who May Perform Tests. Section 6. The tests shall be made by a duly qualified expert or experts, not to exceed three, to be appointed by the court. The expert or experts shall conduct the tests under such directions and restrictions as the court may deem proper. Whenever just cause is shown, the court shall order another set of tests made.

Notice to Those to be Examined. Section 7. The order for blood grouping tests shall be made upon notice to the parties to be examined and to all other persons involved in the proceeding and shall specify the time, place, manner, conditions and scope of the examination and the expert or experts by whom it is to be made.

Testimony Taken by Deposition. Section 8. The order for such tests may, in the discretion of the court, direct that the testimony of the expert or experts be taken by deposition.

Effect of Refusal to Submit to Tests. Section 9. Whenever the court orders blood grouping tests to be made and one or more of the persons necessary to the proper conduct thereof refuses to submit to such tests, the court may find such person or persons in contempt of court. Furthermore, the court, in its discretion, may disclose such refusal to the jury.

Cost of Tests. Section 10. The court shall determine how and by whom the cost of such tests shall be paid.

Severability Clause. Section 11. If any part, section or subsection of this Act is declared unconstitutional, it shall not affect the remaining portions thereof.

Repealing Clause. Section 12. All laws and parts of laws in conflict herewith are hereby repealed.

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