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The Judicial Weight of Blood Grouping Test Results

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In the "Police Science Legal Abstracts and Notes" section of a recent number of this Journal,[1] the Editor, in reporting on the Ohio Court of Appeals decision in *State ex rel. Slovak v. Holod*,[2] commented as follows: "Many experts will undoubtedly disagree with the decision of the Ohio Court of Appeals. . . . ., and yet it must be conceded by all that the court's opinion is supported by some sound reasoning." Since I not only disagree with the decision but also refuse to concede that the opinion is supported by any sound reasoning, I submit herewith my views to the contrary.

It will be recalled that in the *Holod* case the Ohio Court of Appeals refused to set aside a trial court verdict which adjudged the defendant to be the father of the complainant's child, *despite the testimony of a serologist who testified that the results of blood grouping tests excluded the defendant as a possible parent.*

One argument offered by the appellate court in this case for its agreement with the trial court in not giving the blood test evidence special weight was the possibility of the occurrence of exceptions to the laws of heredity of the blood groups and M, N types. The court quoted a report of the American Medical Association's Committee on Medicolegal Blood Grouping Tests [of which Dr. Wiener was a member] where an apparent exception to the theory is mentioned. However, it should be pointed out that this exception, if it really can be considered as such, was the only one among more than 25,000 individuals tested. Accordingly, even conceding that this exception is a true one, and that it was due to a mutation, this possibility of error is in the proportion of one in more than 25,000 cases.

Let us compare the foregoing objection with the accuracy of court decisions in general. Upon the trial of every case two sides to the contest are presented in court, and both contentions cannot possibly be right. One or more of the witnesses is not telling the truth and the court has to decide whose testimony to believe. The accuracy of the decisions rendered by trial judges and juries can be estimated by considering the number of cases that are appealed and reversed. On the other hand, when a qualified blood specialist, in conducting a blood grouping test, obtains a particular result, that same result will be reached by other experts. It cannot be reversed, overruled, or set aside, because it represents a scientific finding. Hence, blood grouping test evidence is immeasurably more accurate than any other means available to the courts for the obtaining of true facts in cases of disputed parentage.

The defendant, in his brief, quite properly argued that the relatively short period in which blood tests have been applied in this country does not detract from their value since "the law of gravitation was just as reliable and effective an hour after it was discovered as it is today, many centuries later." The court replied, however, that "Einstein's mathematical calculations have conclusively established the incorrectness of Newton's theory that objects fall in straight lines. Hence there fell by the wayside one of those laws of nature, long held immutable, which courts have perhaps judicially noticed and applied as conclusive." The court failed to consider that Einstein's theory does not at all invalidate Newton's theory as applied in *everyday life.* Einstein's theory becomes important when dealing with velocities approaching in magnitude that of the velocity of light—180,000 miles a second. Ordinarily, however, we deal with velocities not exceeding 500 miles per hour, and for such speeds Newton's laws of motion are cer-

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[1] Vol. 31, No. 1, p. 128 (1940).

[2] State ex rel. Slovak v. Holod, 63 Ohio App. 16, 24 N. E. (2d) 962 (1939).

tainly accurate enough.[3] Similarly, the blood tests are accurate enough for everyday use in the courtroom, for the chance of running into the one exception that may possibly occur among more than 25,000 cases is extremely remote. Moreover, the laws governing the heredity of the blood groups are among the most accurate of the biological laws thus far discovered, there being hardly any biological phenomenon to which an exception cannot ever occur.

The court also remarked that: "It is also known that there are certain people known as bleeders whose blood fails to coagulate like that of normal persons; an example of this class is found in the family of the deposed king of Spain. This trait of character is transmissible to the male offspring of a family. It is hereditary. Yet we find no report of blood testing of people belonging to that class. This engenders the query: Will their blood react in the same uniformity?" Actually, the phenomenon occurring in the blood of bleeders or hemophiliacs, wherein their blood does not coagulate normally, has nothing at all to do with the reactions of agglutination used in the making of blood grouping tests. The heredity of hemophilia has nothing to do with the heredity of the blood groups. Accordingly, the blood groups among hemophiliacs have the same uniformity in behavior as among normal individuals.[4]

The court also raised the question: "Will bloods of hybrids so react?" If by this the court wanted to know if grouping of individuals of different races and crosses of different races is the same as in whites, the answer is "yes." The only difference with regard to the blood groups in different races is that certain blood groups are more common in some races than in others, but the laws of inheritance are the same regardless of race, hybridity, etc.

The court's statement that "it is possible that further discoveries may be made of linkage among determiners, or of dominant and recessive characteristics that may modify experimental results" is not quite clear. If the court is trying to state that further refinements in the mechanism of heredity may be discovered in future studies, just as Einstein's theory is in a way a refinement of Newton's theory to be used with velocities of the same order as the velocity of light, a similar reply is in order: The reliability of the blood grouping tests will still be so great that no other type of evidence can approach it.

The court also contends that "the acceptance of the report of the expert presupposes absolute honesty in the experimenter as well as positive ability. It wipes out all chance of innocent mistakes. It assumes that serums are fresh and that blood tested is of proper age or consistency." The answer to this is that if any doubt existed in the trial court's mind it could have appointed an independent expert to repeat the tests. A qualified individual will almost never make a mistake in a routine procedure such as blood grouping tests, and it is inconceivable that two qualified specialists would make the same mistake and submit identical erroneous reports. If necessary, the blood specimens could be mailed to another part of the state or country so that there could be no contact possible between the persons carrying out the tests. In this way, any chance of the identical error occurring, or of collusion with the same intentionally dishonest reports being tendered, would be excluded. If, despite its knowledge of the ability and integrity of the expert who testified in this case, the trial court actually entertained any doubts as to her accuracy or veracity, it could have had the tests repeated by another expert.

In the syllabus of the court the following statement appears: "The court may rightfully refuse a requested instruction to the jury when such instruction would cause the court to express its opinion or decide an ultimate fact which the jury must find." Since the jury cannot be expected to know all about the scientific aspects of blood

[3] For example, the speed of vehicles involved in accidents can be accurately determined, with the aid of Newton's laws of motion, from the length of skid marks, and evidence based upon such calculations has been accepted in court. See People, on complaint of Lucius v. Herman, 20 N. Y. (2d) 149 (1940), and note in 31 J. Criminal L. and Crim. 249 (1940).

[4] For further information upon this subject see the writer's book *Blood Groups and Blood Transfusion* (1939), which was reviewed in the July-August, 1940 number of this Journal.

grouping tests, it should be the duty of the judge to instruct the jury in this regard. As an analogy, let us consider a hypothetical case confronting a medical practitioner. A woman, following childbirth, has a hemorrhage of such magnitude that she lapses into shock and is in danger of death. The physician knows from past experience and study that a patient in her condition, if left alone, will usually die; but, if transfused in time with blood of the proper group she will almost certainly recover. Such blood is available to him so that he can proceed with the transfusion at a moment's notice. He knows also that in one among about ten thousand cases there may be a serious or fatal reaction to the transfusion even though the bloods of donor and patient appear to be perfectly matched. Refusing to assume this responsibility he leaves it to the patient and her family to determine whether or not the transfusion shall be carried out, giving equal emphasis to the chance of recovery without a transfusion and the chance of her death as a result of a transfusion. The family decides to take its chances without a transfusion and the patient dies. Obviously, the proper procedure was to have given the blood transfusion as this would almost certainly have saved the patient's life, the chance of a harmful reaction being very remote. In the hypothetical case just described one might say, in the language of the court, that the physician did not take "judicial notice" of the advantage of giving the blood transfusion, and merely informed the family that if a transfusion were given there was a chance that a fatal reaction might occur, and on the other hand there was a chance that the patient might recover if left alone. As a matter of fact, he should have more strongly emphasized that the chance of surviving was far greater with a blood transfusion. Similarly, in fair comment on the evidence in the *Holod* case, the court should have charged the jury that more weight was to be given to the blood test report than to the other evidence offered to the contrary.

Two Adverse Decisions on Blood Grouping Tests

The Domestic Relations Court of the City of New York and the Court of Chancery of New Jersey recently rendered two adverse decisions on the admissibility of blood grouping test results. Despite the clear wording of the blood grouping statutes in both New York and New Jersey, the judges in these two cases seemed to have substituted their own personal opinions (or shall we say prejudices) for the expression of the legislative will as embodied in the two statutes. In the New York case, *Harding v. Harding*, 22 N. Y. Supp. (2d) 810 (N. Y. 1940), the defendant's wife was applying for an increase in the amount of financial support which had previously been allowed for the plaintiff and her child. In opposition to the plaintiff's application, the defendant introduced evidence that blood grouping test results had proved the child was not his own. The judge refused to consider the blood grouping test results and gave the following reason for not doing so: "To question the legitimacy of a child challenges the fidelity and good name of the wife . . . and injures the reputation and standing of the entire family."

In the New Jersey case, *Bedmarik v. Bedmarik*, 16 Atl. (2d) 80 (N. J., 1940), involving a divorce suit, the husband applied for an order that the wife and her child be made to submit to blood grouping tests for the purpose of determining whether or not the petitioner could have been the father of the child. For the following reason given by the advisory master in this case, the petition was denied: "The public policy does not favor divorce. It regards the family as a social unit, and does not encourge the annulment or dissolution of that relationship. It recognizes, with the strongest presumption, the legitimacy of every child born in wedlock . . . To grant petitioner's application would in my judgment amount to an unconstitutional invasion of the right of personal privacy of the defendant and of the child."

Both of the foregoing decisions seem to represent an ecclesiastical philosophy rather than any judicial reasoning. It is hoped that an appeal in the cases will result in a reversal of the decisions or that in some other manner the decisions will be repudiated by the higher courts of these states.