Can Scientists Tell Babies Apart?

They Have an Easy Test in the Watkins-Bamberger Suit

RE heredity experts justified in assuming the role of Solomon in a dispute between parents over the identity of their offspring?

"Sometimes, only," is the answer indicated by the mass of data accumulated by science to date on this question, which has awakened such controversy in the Watkins-Bamberger suit concerning the alleged interchange of babies at the Englewood Hospital in Chicago. In many instances, the experts would be forced to shrug their shoulders without essaying a definite "Yes," or "No," to the pleas of distraught parents.

While complete reports of the findings have not been made public, newspaper accounts seem to indicate that this is a case where the blood group tests to establish parentage could apply. For the parents in question are said to belong to different blood groups and the children, according to the laws of heredity, would be distinguishable by a corresponding difference in type.

Physiologists have established that practically all human beings belong to one of four principal blood groups and that children inherit the characteristics of either one or the other of their parents, if they do not take after both.

Difference in blood group is readily detectable when the blood of two individuals is tested, because of the clumping or "agglutinating" effect that alien blood strains have on each other, whereas blood from different persons of the same group mingles freely.

Blood Test Used

Thus if a father and mother, both belonging to Group O, were left with the choice of two infants, of Group O and A, respectively, theoretically the Group O baby would be their blood kin, and the A Group child could not be.

Father and Mother Watkins both happen to belong to the O Group, if published accounts are accurate. But the baby delivered to them by the hospital is of Group A, and not their child by verdict of the blood tests. Mother Bamberger, on the other hand, is said to belong to the AB Group, yet the baby in her arms is an O Group child. All of which sounds like a mixup somewhere.

One caution has been urged on modern Solomons by scientists, however. Very young infants may not have their final blood group fully established. With infants less than a month old, the test should be repeated after several months have elapsed.

If this suggestion is complied with, it will mean that the disputed pair of infants of the Watkins and Bamberger domiciles should undergo a confirming test. Then, if the published accounts of the findings are accurate, the verdict should be reasonably certain.

With all the controversy that is raging around the heads of the Chicago experts, no one would envy them their job. Yet the Watkins-Bamberger case of mixed identities

The Answer Is In This Issue

What chance have scientists of telling the Watkins-Bamberger babies apart? p. 98—Is it possible that countries will exchange secondary school children to promote international cooperation? p. 99—In what way can aviators lessen the dangers of weather? p. 100—Are other parts of the world wet or dry while the United States parches? p. 102—Can a butterfly wing take a picture of itself in the dark? p. 103—Does your heart beat faster when you think hard? p. 104—How is the world protecting itself from gases of both peace and war? p. 106 -What peculiarity of light makes it possible for astronomers to measure the speed of spinning stars? p. 109.

is a simple one to unravel compared to what might have been. If, for instance, one parent of each family had belonged to the same blood group (say Group A), and both children had by a prank of fate been Group A babies, then all the experts could have done would have been to let the parents fight it out between themselves and the hospital authorities, as they are doing anyway.

Chances for Success

Some idea of the difficulty facing a modern Solomon may be gleaned from a report of the chances of establishing a child's paternity by blood grouping tests, mathematically computed by Dr. Sanford B. Hooker and Dr. William C. Boyd of the Evans Memorial for Clinical Research and Preventive Medicine of Boston. They estimate that in cases where the paternity of the father alone was brought into question, the probability of establishing nonpaternity was one to five for Group O, one to 17 for Group A, one to seven for Group B, and one to two for Group AB. These probabilities are based on the frequency of distribution of the groups among the white population of the United States and upon the laws governing the inheritance of blood groups.

That the Bamberger parents were Jewish and the Watkins parents Gentile might be thought to have simplified the problem facing the experts, but science has been cautious about accepting any rule for determining race, either by blood tests or from peculiar shaping of the head, as infallible. Though extensive studies have shown a tendency among the Jews to fit into a different blood group from the peoples of a western origin, individual exceptions are too numerous to allow application of this test to apply in a case of lost identity. The same criticism applies to finger print tests.

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