BOOK REVIEW

C. G. McWright, Ph.D.

A Review of Paternity Testing by Blood Grouping


Paternity Testing By Blood Grouping by Dr. Leon N. Sussman is revised and updated from the original 1968 edition entitled Blood Grouping—Medicolegal Uses. It covers succinctly and ably the development and current status of the field of immunohematology. The A-B-O, M-N-S-s, Rh-Hr, Kidd, Duffy, and Lutheran blood group systems as well as polymorphic serum proteins and erythrocyte isoenzymes receive critical attention from the standpoint of their medicolegal applications in disputed paternity cases.

The reader is provided with an insight into the techniques of blood grouping and isoenzyme typing. Although this coverage is by no means all-encompassing, an excellent list of references is provided for anyone who would like to pursue this area in greater detail.

This book includes discussions not only of disputed paternity cases but also of bloodstain analysis in criminal cases. Its main focus is on the use of blood grouping tests for medicolegal purposes. For this reason, the title of the 1968 edition would have been more appropriate. Still, this does not detract from the author's successfully achieving his objective. He has provided an abundance of interesting examples illustrating the use of blood grouping in successfully resolving cases of disputed paternity. Pitfalls to be avoided by the scientific investigator are also wisely included. Additionally, examples are provided that describe the application of serological procedures in bloodstain analysis in the investigation of violent crimes.

The weakest area of this edition is the chapter "Supplementary Applications." Dr. Sussman states, "Under favorable conditions, A-B-O grouping may be determined on old clots and stains. Sometimes the M agglutinogen can also be identified. The other blood group agglutinogens cannot be reliably determined in old blood stains."

It is important to note that Rh-Hr blood groups may also be determined from bloodstains under certain circumstances. This is attested to by court testimony in the United States and the United Kingdom. In the interest of enlightening those of the criminal justice community, it would have been valuable to mention isoenzyme typing of bloodstains, particularly phosphoglucomutase typing. Phosphoglucomutase and other isoenzymes are frequently used for characterizing bloodstains. The results of such analyses are widely accepted in courts.

In summary, the informal presentation of the subjects in the book makes for easy and interesting reading. It should serve as a valuable current reference for the pathologist, criminalist, and attorney.

1Research coordinator, Scientific and Technical Services Division, Federal Bureau of Investigation, Washington, D.C. 20535.