screen was negative and she was transfused with two of the directed donor units. Two weeks later (approximately 6 days prior to her scheduled Caesarean section), her hemoglobin level was 7.4 g/dL. Units three and four were crossmatched. The antibody screen was now positive and both units were incompatible. Units five and six were crossmatched and one was compatible.

This reference laboratory was alerted to the serologic findings at this point by a person calling to inquire whether it was acceptable to transfuse the compatible unit. Our instruction was to withhold the transfusion until the antibody could be identified.

Anti-Fy^a^ was identified in both the serum and an eluate prepared from the patient's cells. Anti-Fy^a^ probably became demonstrable as the result of an anamnestic response.

Arrangements were made for the collection of six additional directed donor units that were Fy(a−). The patient was transfused with two of the Fy(a−) units the day before her scheduled Caesarean section.

When inquiry was made concerning the status of the infant, the laboratory staff submitted the cord blood sample. The infant had a positive direct antiglobulin test, and anti-Fy^a^ was recovered in an eluate prepared from the infant's red cells. The bilirubin was not significantly elevated, and treatment of the infant was not required.

This case demonstrates that when directed donor units are collected in the same time period and are to be used over several days or weeks, the sudden appearance of red cell antibody may preclude use of some of the units.

Time and circumstances do not always permit the use of directed donors as planned. However, this situation does not alleviate the need to adhere to accepted transfusion practice.

Karen Waldorf, MT(ASCP)SBB
American Red Cross Blood Services
Wichita Region
707 N. Main
Wichita, KS 67203

Ortho Dedication

From the Editor:

The editorial staff of Immunohematology is grateful to Ortho Diagnostic Systems, Inc., for its generous contribution each year in support of publication of the third issue (September) of the journal.

Ortho is a leading, worldwide manufacturer of reagents for the blood bank. It has a history of leadership in the blood bank field, including support of educational endeavors and development of monoclonal antibodies, infectious disease screening tests, and Rh immune globulin.

At the 1991 American Association of Blood Banks meeting in Baltimore, I presented an award to Mr. William W. Crouse, Worldwide President, Ortho Diagnostic Systems, Inc., and Vice President, Johnson and Johnson International, as a token of our appreciation for continued support of Immunohematology (see photo below).

Delores Mallory
Editor-in-Chief

Note: Recognition and appreciation of such donation in no way represents Red Cross endorsement of any company or product.

Free Poster

From the Editor:

As promised in the last issue of Immunohematology, a poster entitled “Effect of enzymes on and chemical modifications of red cell antigens” based on the table published in Geoff Daniels’ article in this issue will be ready for complimentary distribution at the American Association of Blood Banks (AABB) Annual Meeting this year.

The 17" X 22" poster has been designed so that future findings on the effect of enzymes and chemical
modifications on other red cell antigens may be added. Such additions will keep the poster up to date.

After the AABB Annual Meeting, posters may be obtained by contacting the managing editor of *Immunohematology* at (301) 738-0530 or by fax at (301) 738-0666.

Delores Mallory
Editor-in-Chief

---

**LITERATURE REVIEW**

**Red Blood Cell Enzyme Immunoassays**

**Methods**


**Applications**

1. Bessos H, Yule A. Direct comparisons between a radioimmune antiglobulin test, an enzyme-linked