Michigan Association of Blood Banks presents

Winter/Spring 2008

In A Different Vein

Michigan Association of Blood Banks, c/o Lisa Tyzo, 29832 Buckingham, Livonia MI 48154
www.mabb.org MABB_lisa@yahoo.com 734-422-3630

PRESIDENT'S MESSAGE

By Laura Cooling, MD, MS

Despite the snow and cold, planning for the annual fall meeting has started. The annual planning committee met January 15 at Schoolcraft College to review the response from the 2007 fall meeting and plan for the year to come. Overall, we had very positive reviews of our fall program although overall attendance and revenue were down a bit from previous years. Several excellent topics and speakers were suggested for the 2008 meeting by the committee. It looks to be another excellent program for our members. The date for the 2008 fall meeting is Sept 17 & 18 at Schoolcraft College, Livonia.

Inside This Issue

The board welcomes several new members this year including Dr. Barbara O'Malley, secretary; Sharon Lowry, member-at-large and Suzanne Butch, president-elect and chairman of the 2008 annual meeting. Ann Steiner has agreed to chair our membership committee. In addition, Jim Fiedor has graciously offered to chair the publications committee as well as assume the role of the MABB archivist.

Terry Downs remains chair of the education committee with support by Kathryn Walker and other committee members. This important and active committee has several events planned for the upcoming year. A wet workshop for identifying complex serology problems is slated for May 8 at the MSU campus. Terry and I would like to specifically thank Vija Miske for preparation of samples for the course. In addition, two RAP sessions are planned for this fall on the clinical and laboratory aspects of transfusion reaction investigations. Faculty for the RAPs will be Dr. Barb O'Malley and Sharon Lowry.

As always, we hope that our members will share interesting cases, articles or other items of interest for publication in our Newsletter. Blood bankers always love case studies. Contact Jim Fiedor, Sandra Hoffmann or Mary DePouw if you have an item you would like to share with your peers. Don't be concerned about your writing skills: the publication staff will help prepare the case for publication.

Continued on Page 2...

Continued from Page 1...

Membership renewals were emailed last month for the 2008 year. For those members who did not renew their 2008 membership, please remember to do so. If you did not receive an email, contact the MABB administrator Liza Tyzo.

As always, the board welcomes ideas and suggestions for the upcoming year. We also encourage members who wish to become involved on committees to contact either me or other board members. Involvement by our members is what makes the MABB a strong and active state society with national recognition.

HOLD THE DATE

54th MABB Annual Meeting: September 17 - 18, 2008

Education Committee News

By Terry Downs
Education Committee Chair

The Education Committee is gearing up for a new year of activities. This year we are offering the Spring Wet Workshop. Save Thursday, May 8th for an exciting opportunity to challenge yourself with complex antibody problems using a variety of methods. Gel, tube and solid phase techniques will be available to practice antibody identification. There will be presentations on techniques, panel interpretation, common problems of different methods and procuring antigen negative blood. The workshop will be held at Michigan State University. Watch for flyers soon!

Also in the works are two RAP sessions on Transfusion Reactions. We are planning one in Gaylord in late October and another in the Detroit area in early November.

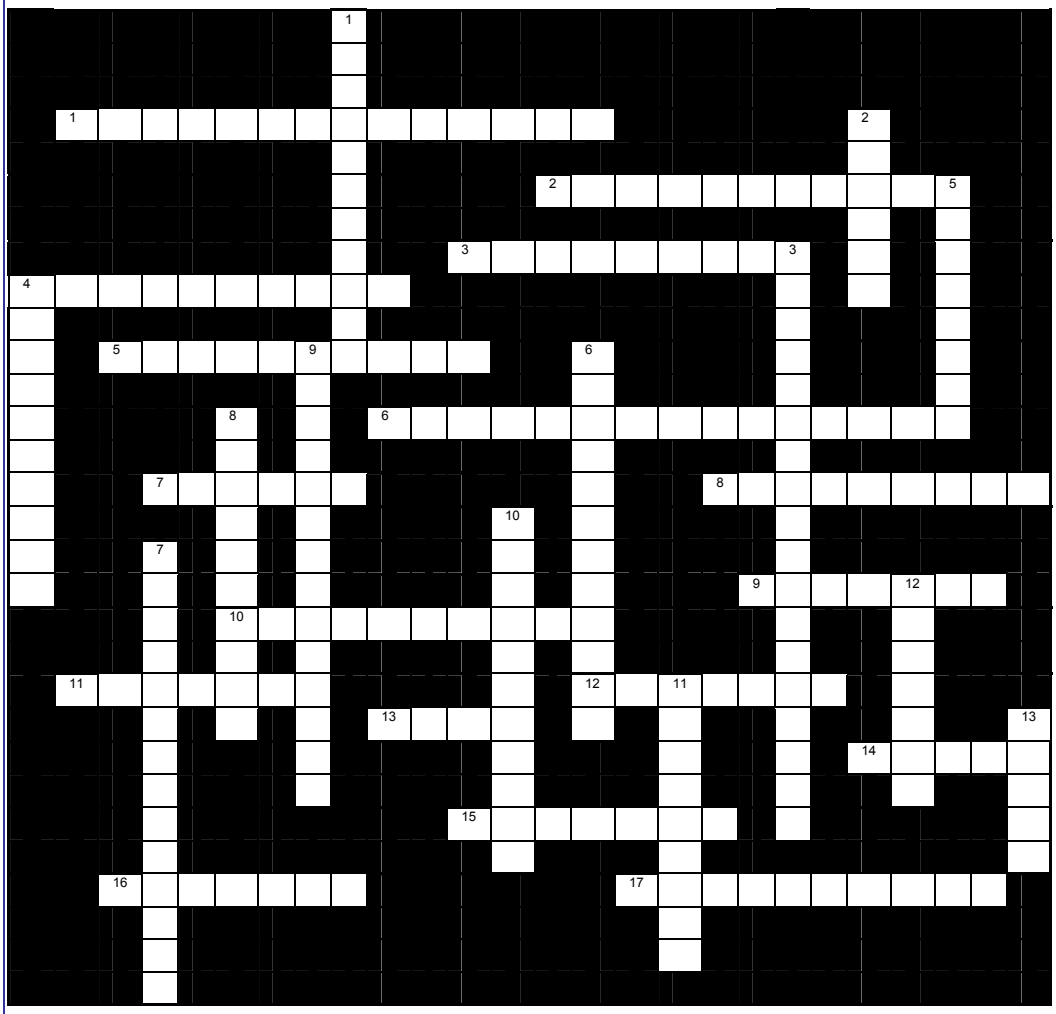
Looking forward to seeing you there!

VISIT US ONLINE AT
www.mabb.org

Announcements - Newsletter - Upcoming Events - Job Postings - Contact Information - RAP Sessions - Useful Links - Photo Gallery - Meet the Board - Membership Information

TRANSFUSION Confusion

Submitted by Meredith Hoag,
University of Michigan



Across

1 A growth factor that stimulates RBC production.
2 Discovered the ABO groups.
3 Due to functioning poorly in the cold, red cells lose this and gain sodium.
4 Ulex europaeus
5 Advertised with a red & white striped pole (representing blood & bandages) that endures to this day.
6 The Duffy glycoprotein is known to be a receptor for this parasite.
7 Very rare person whose red cells & secretions lack H,A,&B antigens.
8 Testing serial twofold dilutions of serum against selected red cell samples.
9 M,N,S,Fya,&Fyb are destroyed by these.
10 Known as the "Yt" antibodies & the Bonanza family name.
11 Removes antibody, but leaves red cells intact to allow for testing of various antigens or for use an adsorption procedures.
12 Where DNA is found inside a cell.
13 Life-threatening disease that can occur after transfusing the blood of a related donor without irradiating it.
14 Under normal conditions, the blood transfers excess heat from this organ to the skin, preventing overheating of the organ.
15 These were kept in jars & became a standard medical practice. In fact, in 1833 France alone imported 41.5 million of these suckers!
16 When antigen-antibody complexes form, but do not show a visible lattice.
17 These patients are phenotypically matched to avoid future alloimmunization.

Down

1 B cells & T cells
2 This is usually effective in helping to raise the platelet count in an ITP pt.
3 Transfusing a recipient's total blood volume within a 24 hour time frame.
4 Test useful for separating multiple antibodies present in a single serum.
5 This formation can be mistaken for agglutination.
6 Sure, George Washington had severe throat inflammation & was terribly ill, but what did he really die from in 1799 at 67 yrs old?
7 To deglycerolize a unit, you must wash the unit 3 separate times using decreasing amounts of this.
8 This has to be 38% to donate blood.
9 Sepsis, high fever, DIC, medications, hypersplenism, & complement-mediated destruction can all cause platelet _____.
10 This type of hemolytic anemia often results from transfusion & the patient being on a cephalosporin.
11 The presence of donor cells in the recipient.
12 The process in which the body grows or replaces dead or injured cells.
13 This life-threatening reaction (abbrev) is characterized by resp. distress, hypo/ hypertension & non-cardiogenic pulmonary edema.

Answers on the final page!

MABB-ARC Seminar on ISBT Implementation

By Mary DePouw

A seminar co-sponsored by the Southeast Michigan American Red Cross and the MABB was held last November 7, 2007. The topic, *ISBT 128: Are You Ready?*, was an update to prepare blood suppliers and transfusion services in the process of implementing the international labeling of blood products.

Scott Chesna of the American Red Cross gave a presentation describing the blood center's process for implementing ISBT 128. He described the details of the product label including the new donor identification number. The expiration date will appear on the lower corner of the label as well as special testing and phenotypes of the unit.

Angelo D'Anna and Mike Cortez circulate the room answering questions

Suzanne Butch of the University of Michigan Hospitals gave a comprehensive presentation for the transfusion service process on implementation. She explained the reasons and benefits of the international labeling. Each step of the implementation process was discussed along with references to contact for further information.

Lunch was provided by the American Red Cross allowing for valuable interchange of ideas.

Angelo D'Anna, making sure the ISBT seminar runs smoothly

Discussion and networking continued through lunch

Continued on Page 5...

Continued from Page 4...

Jim Fiedor taking notes during ISBT presentation

Suzanne Butch discussing implementation with other participants

Suzanne Butch presenting a slide show describing the ISBT label

Review of Fatalities Reported to FDA Following Blood Collection and Transfusion
Annual Summary for Fiscal Years 2005 and 2006

By Bruce Newman, MD

http://www.fda.gov/cber/blood/fatal0506.pdf

The FDA recently reported on transfusion-related fatalities reported to the FDA in 2005 and 2006. There is a great deal that we can learn from this information. As the risks for hepatitis, HIV, and bacteria have been greatly reduced, we are now concentrating on the remaining risks, which include transfusion related acute lung injury (TRALI), hemolytic transfusion reactions, and the remaining transfusion-associated bacterial infections. There were 200 reported fatalities to the FDA in 2005 and 2006. Of these, 125 cases were confirmed to be transfusion-related deaths.

From the 125 confirmed transfusion-related deaths, 64 cases (51%) were TRALI, 34 cases (27%) were antibody-related hemolytic deaths, and 15 cases (12%) were microbial-infection-related deaths. These three categories comprise 90% of all reported cases. TRALI is being better reported today because of the emphasis placed on reporting it. Sixty-one percent of the TRALI cases involved a plasma transfusion in comparison to 19% for all other transfusions. An HLA antibody was identified in 36 cases (56%) and in 8 of these, the reporters were able to identify a cognate antigen (match between donor and recipient). CBER recently described the U.S. experience with TRALI, which is cited in two recent references (#10, 11).

Of the 34 antibody-mediated hemolytic-related deaths, 74% were from non-ABO red-blood-cell antibodies; and 26% were from ABO antibodies. Non-ABO antibodies often involved multiple antibodies (29% of cases), but they also included Kidd antibodies (15%), K group antibodies (9%), and Duffy antibodies (6%). The antibodies were not divided into immediate or delayed hemolytic transfusion reactions. The 9 ABO hemolytic transfusion-related deaths were all due to errors: 5 involved a recipient error, 2 involved a transfusion service clerical error, 1 involved both a clerical and recipient error, and 1 was due to a group O apheresis unit transfused to a group A patient. The FDA is encouraging machine-readable labels as one means to reduce these errors, but the issues are more complex.

Of the 15 microbial-infection-related deaths, 5 were from red-blood cell units and 10 were from platelet transfusions, with 8 of the 10 being plateletpheresis units. The bacteria in the RBC units were either gram-negative organisms (3) or Babesia (2). There was a wider variety of organisms causing the platelet-related transfusion deaths. Overall 47% of the transfusion-related deaths were due to gram-negative organisms. The FDA has noted a significant decrease in microbial-related plateletpheresis-unit deaths since the voluntary implementation of bacterial testing for these units.

Continued on Page 7...

Continued from Page 6...

In all, there were 125 confirmed transfusion-related deaths from a total of approximately 58 million components transfused (1 in 464,000). However, we know that there is significant under reporting to the FDA. Transfusion-related deaths should be reported to the FDA if the transfusion is the main cause or even a contributing cause to the patient's death.

ADMINISTRATIVE OFFICE

Michigan Association of Blood Banks
c/o Lisa Tyzo
29832 Buckingham
Livonia, MI 48154

Phone and Fax line: 734-422-3630
Email: MABB_lisa@yahoo.com

WEBSITE & NEWSLETTER

Newsletter production and Web updates

Bethany Neldrett
Email: mabbwebmaster@gmail.com

Website: www.mabb.org

SEND ARTICLES TO EDITORS:

The deadline for next issue is July 1st!

Jim Fiedor MT(ASCP) – DMC/Harper Hospital
313-966-2942 email: jfiedor@dmc.org

Bruce Newman, MD – American Red Cross
313-833-2651 email: newmanb@usa.redcross.org

TRANSFUSION Confusion

ANSWERS!