In a Different Vein

A NEWSLETTER OF THE
MICHIGAN ASSOCIATION OF BLOOD BANKS

Vol. XXI, No. 4
Fall, 2002

President's Message
Memories

I can't believe that a year could pass so quickly. This is my last column as MABB President. It has been an honor and privilege to serve as President for such a dedicated group of professionals. Thank you.

When I think of last year's annual meeting, I am still amazed at how many people stepped up to the plate and pitched in to make the meeting a success. I won't name any names for fear of missing someone, but to all of you who were there, I want to express my sincere gratitude. That we could hold such a fantastic meeting under those circumstances says a lot about the caliber of our membership.

Speaking of fantastic meetings, this year's annual meeting was wonderful. Michelle Tuson and the committee outdid themselves. I loved having muffins and bagels in the morning. I am not a morning person, so I need all the nourishment that I can get. Thank you to Terumo Medical, Pall Medical and the American Red Cross/Southeastern Michigan Region for providing breakfast. Thank you to all of our other vendors. We could not hold the meeting without you (nor would we want to).

Our theme was serology and that topic brings back many memories for all of us. John Judd spoke about the pioneers who laid the ground work for exciting new discoveries. We remembered some of the original "first ladies" of blood banking like Kay Beattie and Grace Neitzer. We heard from some of the present "first ladies" ~ Linda Issitt, Marilyn Moulds and Connie Westhoff. It was a treat to have them join us.

Peyton Metzel gave us a glimpse into the future with viral inactivation. Dr. Alvin Schmaier presented a wonderful lecture on the new therapeutic products for coagulopathies. Dr. Marian Petrides amazed us with computer generated learning. We always need a lawyer to keep us in check, and Edward Goldman made HIPAA interesting. That took talent. The case studies are always my favorite, and I was not disappointed. Best of all was seeing so many new and familiar faces. I am so glad that you were able to participate.

Dr. Brad Eisenbrey was presented with the Founder's Award. His lecture dedicated to the events of September 11th affirmed our choice. What a moving presentation! It made us proud to be Americans and to remember those who lost their lives or their loved ones.

For me it was a time to reflect on a personal loss. A fellow blood banker, friend and former coworker, Carole Burnett, had passed earlier in the week. We always ate lunch together at the meeting and I sorely missed her. I didn't have the chance to say good bye to Carole, because she did not let any of us know the seriousness of her illness. At first, I was angry with her. I gradually came to accept that Carole always did things on her own terms.

Carole was a professional in every sense of the word. She had "Standards" that made the AABB and FDA look like lightweights. When she would come into my office and close the door, I usually knew that I had violated those standards. I would rather have been in an office with five FDA inspectors. Carole always let me know what I had done wrong and that she expected me to correct my deficiencies. I would often defend my point of view, but I don't have to take off my shoes to count the number of times that I changed her mind. You did not change Carole's mind easily. That sometimes frustrated me. However, I admired the strength of her convictions. I could never picture Carole as anything but vibrant and full of life. We used to commiserate about raising our daughters and trying to be good daughters ourselves. My heart goes out to her daughter and her mother. I treasured Carole's friendship and I am so glad that she was my friend.

Mark your calendars for next year's meeting and we will make it meeting number 49. Hope to see you there.

Sharon Cisco, Emanuel Hackel, Linda Cardine, and Michelle Tuson (some special MABB friends who helped make <u>many</u> wonderful memories!)

MICHIGAN ASSOCIATION OF BLOOD BANKS
Administrative Office
P.O. Box 3605
Center Line, MI 48015-0605
(586) 573-2500 • (586) 573-7058 Fax
Web Site: mabb.org

In a Different Vein is a quarterly publication of the Michigan Association of Blood Banks. Current and archived issues of this publication are available at the MABB web site: mabb.org.

Please feel free to submit any articles, announcements, advertisements, or case studies to ***In a Different Vein***. Items of a personal note regarding colleagues are also welcome.

Send articles to editors:
Mary DePouw
Crittenton Hospital Blood Bank
1101 W. University Drive • Rochester, MI 48307
(248) 652-5275
-or-
Ann Steiner
Ortho-Clinical Diagnostics
1 (800) 421-3311, 5, 2, Ext. 4103
e-mail: asteine2@ocdus.jnj.com

Submission deadline for next issue is 1/15/2003

2001 - 2002 MABB Officers

President
Linda Cardine, MT(ASCP)SBB

President-Elect
Michelle Tuson, BS, MT(ASCP)SBB

Past President
Sharon Cisco, MT(ASCP)SBB

Secretary/Treasurer
Patricia Fedoronko, MT(ASCP)SBB

Members-at-Large
MaryJo Drew, MD, MHSA
Bruce Newman, MD
Peggy Stoe, MT(ASCP)SBB, CQA, ASQ
Margaret Wilde, MT(ASCP)SBB

In Memory of a Dear Friend

Carole L. Burnett

The Blood Bank and Laboratory at Sinai Grace Hospital mourn the loss of a good friend and co-worker, **Carole L. Burnett.**

Carole died Sunday, September 8, 2002. Funeral services were held at Hartford Memorial Baptist Church on Friday, September 13, 2002.

Carole was a blood bank technologist for 33 years. She worked first at Sinai Hospital in Detroit, starting there in 1969. When Sinai merged with the Detroit Medical Center and became Sinai Grace Hospital, Carole continued to work as a senior medical technologist in the blood bank. She was instrumental in bringing the Sinai and Grace blood banks together into one work group. Blood banking was very important to Carole. She always demonstrated a high level of professionalism and was a mentor to less experienced technologists, including medical technology students.

Carole was a recipient of the Joanne Loring-Barker Award for excellence in Blood Banking. She was truly a person with high standards that were exhibited in both her personal and professional life.

Carole was an MABB member and a frequent attendee at the MABB meetings. She was a friend to many over the years and touched many lives. Fond memories of Carole will be with us forever.

Susan Adams, MSA, MT(ASCP)SBB

The Michigan Association of Blood Banks Offers. . .

The 2003 Blood Bank Lecture Series

Beginning March, 2003

A program consisting of 58 lectures and two one-day seminars designed for those preparing for the BB/SBB certification or seeking a comprehensive continuing education experience. If there is not sufficient interest, the series will be postponed for another year. Send in your reservation today!!!

When?	**Mondays, 8:30am -12:30pm** **March - November, 2003**	
Where?	**SEMRBC, Detroit**	
Who?	**Individuals or Institutions**	
Fee?	**MABB Individual Members**	**$150**
	***MABB Institutional Members**	
	First registrant	**$150**
	Additional registrants	**$200**
	Non-members	**$200**

****Institutions may rotate attendance among their staff. To facilitate this, one lecture series pass will be issued for each registration fee paid.***

2003 MABB Lecture Series – Registration Form

NAME _____

INSTITUTION _____

MAILING ADDRESS (*indicate if HOME* G *or WORK* G*)* _____

_____

_____

_____

Work Telephone _____

Home Telephone _____

E-mail address _____

Individual Member? ___ **Institutional Member ?**___

 # PASSES REQUESTED (1 FEE = 1 PASS) ____

Complete this form and mail check (payable to MABB) to:

Sharon Cisco, MT (ASCP) SBB
National Testing Laboratories
American Red Cross Blood Services
100 Eliot, Detroit, MI 48201
TEL: 313-465-8516 FAX: 313-465-8404

PROPOSED LECTURE SERIES TOPICS

- ✓ Introduction to Immunology
- ✓ Basic Genetics
- ✓ Molecular Genetics for Blood Bankers
- ✓ Donor Suitability
- ✓ Antigen Antibody Reactions
- ✓ Immunology- Mechanisms
- ✓ Immunology - Case Studies
- ✓ RBC Membrane Biochemistry
- ✓ Management Seminar
- ✓ ABO Genetics & Biochemistry
- ✓ Antibody Identification
- ✓ Resolution of ABO Discrepancies
- ✓ Lutheran and Xg Systems
- ✓ Infectious Disease Testing
- ✓ Infectious Disease Testing - Confirmatory
- ✓ Component Preparation
- ✓ RBC Metabolism and Preservation
- ✓ Complement
- ✓ Pre-transfusion Testing
- ✓ Kell System
- ✓ High and Low Prevalence Antigens
- ✓ Hemolytic Transfusion Reactions
- ✓ Non-Hemolytic Transfusion Reactions
- ✓ Practical Aspects of Rh
- ✓ Rh Genetics and Biochemistry
- ✓ Polyagglutination & Lectins
- ✓ Perinatal Testing
- ✓ MN Antigens and Antibodies
- ✓ MN Genetics & Biochemistry
- ✓ Progenitor Cell Therapies
- ✓ Hemaglobinopathies
- ✓ Blood Derivatives
- ✓ Immune and Drug Induced Hemolysis
- ✓ Non-viral Infectious Diseases
- ✓ "HTLA" Antibodies
- ✓ Duffy, Kidd and Dombrock Systems
- ✓ Growth Factors
- ✓ Coagulation: Intrinsic and Extrinsic Pathways
- ✓ Options for Transfusion
- ✓ Genetics and Methods
- ✓ HLA and Transplantation
- ✓ Componenet Therapy
- ✓ Cytapheresis
- ✓ Hemolytic Anemias
- ✓ Clinical Aspects of HDN
- ✓ Hepatitis Epidemiology
- ✓ Retrovirus Epidemiology
- ✓ Technical Seminar
- ✓ Paternity Testing
- ✓ Neonatal Transfusion
- ✓ Selecting Blood for the Alloimmunized Patient
- ✓ Platelet & Platelet Therapies
- ✓ Therapeutic Apheresis
- ✓ Graft vs. Host Disease
- ✓ Clinical Management of Coagulopathies
- ✓ Blood Bank Calculations
- ✓ Administration of Blood Products
- ✓ Donor Collection and Testing Requirements

2002 MABB Annual Meeting

2002 Founder's Award recipient Dr. Brad Eisenbrey, receiving his award from Dr. Rob Davenport

A very stunned Dr. Eisenbrey thanks the MABB for his award as his wife Louise proudly stands by his side

Board member Margaret Wilde and Sue Adams, both of DMC/Harper Hospital

Linda Cardine accepts her President's plaque from incoming President, Michelle Tuson

John Judd, speaker Marilyn Moulds, and Harry Hirt

MABB speaker Dr. Marian Petrides

Information regarding Dr. Petrides' book:

Petrides M. and Stack G.. Practical Guide to Transfusion Medicine. Bethesda, MD: American Association of Blood Banks Press, 2001. ISBN 1-56395-128-2.

New MABB President Michelle Tuson, speaker Ed Goldman, and Dr. Rob Davenport

Speaker Linda Issitt with John Judd

Speaker Peyton Metzel of BaxterHealthcare and 2002 President Linda Cardine

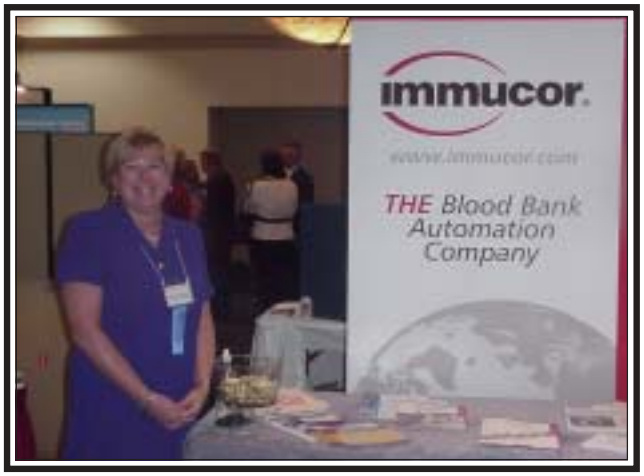
Sue Adams, Marian Chung, and Board Members Peggy Stoe and Dr. Bruce Newman

Dr. Bruce Newman, Dr. Tim Mervak, Dr. Bruce Siegfried and Angelo D'Anna

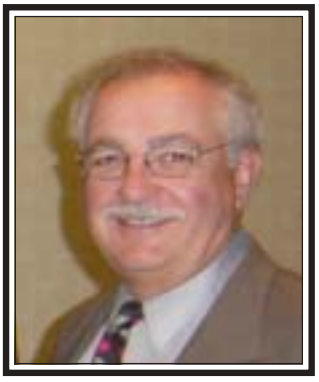
Case presenter Karen Koval and Joseph Roig of Gambro BCT

The MABB would like to thank all the vendors for their time and hard work in bringing the latest equipment and technology to our 48th Annual Meeting. The exhibits were very well attended and the participants had the opportunity to meet with the representatives and see their product lines. Their knowledge and expertise in their respective areas was much appreciated. We have listed the phone numbers and e-mail address of all of the exhibitors below for your reference:

Angelo D'Anna	American Red Cross	313/494-2816	adanna@comcast.net
Tim Neldrett	Amer Red Cross/NTL	313/465-8554	neldrettt@usa.redcross.org
Carol Giunta	Arlington Scientific, Inc.	800/654-0146	CTGiunta@aol.com
Richard Gamble	Baxter Healthcare	847/940-5782	gambler@baxter.com
Scott McDermott	Bio-Logics Products, Inc.	801/561-9208 Ext. 13	sdm@biologicsinc.com
Laurie Schmidt	Bryan Biologicals	313/886-7404	BryanBio@msn.com
Ted Beatty	Charter Medical, Ltd.	810-632-4696	beatty84@aol.com
Joseph Roig	Gambro/BCT	847/420-3986	joseph.roig@gambrobct.com
Aaron Stout	Helmer Labs	317/773-9073	astout@helmerinc.com
Diane Healy	Hemophilia Resources of America	513/235-2791	dhealy@hrahemo.com
Bill Knieps	Jewett Inc./Sorvall-Sorvall Products	800/522-7746 Gen Info	kniepsb@kendro.com
Richard Myers	Jewett Inc./Sorvall-MSA Marketing	810/227-4226 MI Sales Rep	msamm@ismi.net
Joe Piscitello	Novo Dordisk Pharmaceuticals	440/349-3525	Jopi@NNPI.com
Ed DeRose	Ortho Clinical Diagnostics	800/373-3008 Ext. 8044	ederose@ocdus.jnj.com
Jerry Ragozine	Pall Medical	800/288-8377 Ext. 367	Jerry_Ragozine@pall.com
Rick Clark	Terumo Corp.	800/283-7866 Ext. 4714	Rick.Clark@terumomedical.com
Joan Thommen	ThermoGenesis Corp.	916/858-5121	jthommen@thermogenesis.com
Amy Martin	Timemed Labeling Systems, Inc.	800/323-4840	amymartin@timemed.com
Al Puglessi	Wyeth Hemophilia	248/756-0054	puglesa@wyeth.com



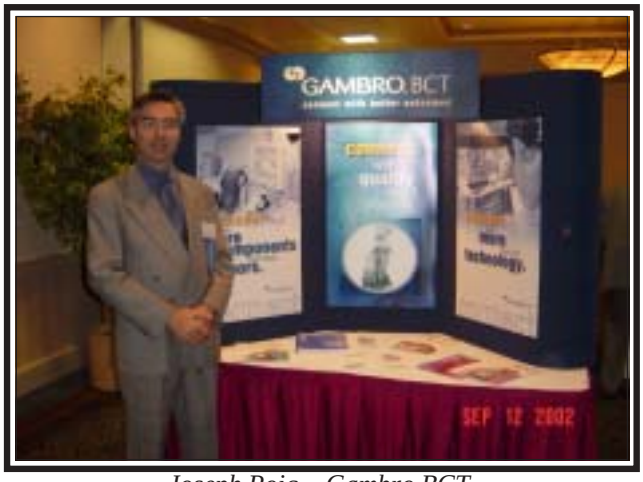
Laurie Schmidt ~ Bryan Biologicals



Angelo D'Anna ~ American Red Cross

Rich Gamble ~ Baxter

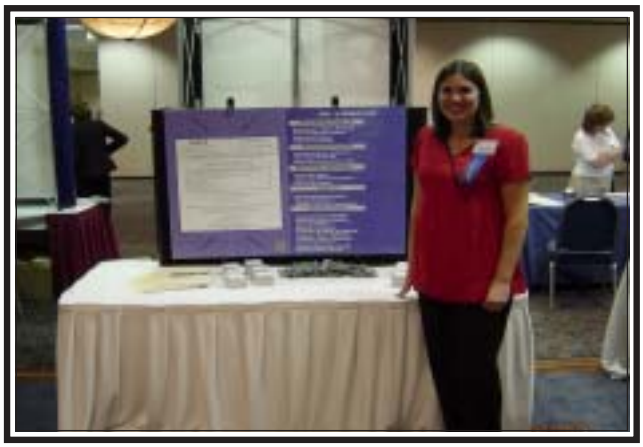
Ortho representatives Cheryl Doelker, Brent Mondry, Ed DeRose and Harry Hirt



Joseph Roig ~ Gambro BCT

Joan Thommen ~ ThermoGenesis

Rick Clark ~ Terumo Medical



Diane Healy ~ Hemophilia Resources of America

Tim Neldrett ~ American Red Cross/NTL

Carol Giunta ~ Arlington Scientific

Al Puglessi ~ Wyeth Hemophilia

Aaron Stout ~ Helmer Labs

Ted Beatty ~ Charter Medical Ltd.

Annual Meeting Memories

Jeff Trimble of Michigan Community Blood Centers with 2003 MABB President Michelle Tuson

Secretary/Treasurer Pat Fedoronko and Margaret Wilde helping with morning registration

Dr. Brad Eisenbrey and Dr. Dorothy Halperin

Publication Committee Chair Mary DePouw and 2002 President Linda Cardine

Past President Sharon Cisco chatting with John Judd

Ed DeRose of Ortho Clinical Diagnostics Systems visits with participants during the break

Membership Update

Welcome to the following new members who joined the MABB at the 2002 Annual Meeting in September:

Julie Abernethy, MT(ASCP)
Wm. Beaumont Hospital/Royal Oak

M. Abigail Briggs, BS, Biol
American Red Cross

Carter Becker, MD
American Red Cross/Lansing

Chris Cresswell, MT(ASCP)
Michigan Community Blood Centers

Jennifer Damaso, MT(ASCP)CSMLS
Providence Hospital

Laura Ganhs, MT(ASCP)
Wm. Beaumont Hospital/Royal Oak

Rita Herden, MT(AMT)
Michigan Community Blood Centers

Thomas Hopkins, MT(ASCP)
Wm. Beaumont Hospital/Royal Oak

Golden Kroeger, MT(ASCP)
University of Michigan

Kim MacFadyen, MT(ASCP)
Wm. Beaumont Hospital/Royal Oak

Peggy Ott, MT(ASCP)
Oakwood Hospital

Valerie Rolsma, MT(ASCP)
University of Michigan Hospital

Barry Siegfried, MD
American Red Cross

Kathy Sobanski, MT(ASCP)
St. Joseph Mercy Hospital/Oakland

Notice to all MABB Members:

The compilation of the MABB Membership Directory has been a long and tedious process. I apologize for the delay in getting this valuable reference to you. We are in the process of evaluating different forms of media to put this information into your hands. My ultimate goal is to make it available to you electronically either via the MABB web site with password access or sent to you on disk for your own use. Please bear with us as we decide on the most cost effective way to proceed. We want to do it once and do it right! Thank you for your patience.

Janet Silvestri
MABB Executive Administrator

Michigan Association of Blood Banks Board of Directors Meeting

September 10, 2002

Attendance: Linda Cardine, Michelle Tuson, Sharon Cisco, Dr. Bruce Newman, Margaret Wilde, Dr. Mary Jo Drew and Patricia Fedoronko.

I. Meeting was called to Order at 3:35 pm
II. Review of Minutes: Motion was made and approved to accept the minutes of the previous meeting
III. Financial Report: Motion was made and approved to accept the financial report as presented.
IV. 2002 Annual Meeting:
    a. Speakers/Transportation-completed
    b. 17 Vendors will attend
        i. Vendors will supply 220 t-shirts for attendees.
    c. Registration-Janet Silvestri and Board Members will be present
    d. Discussion: should pursue new location for the next annual meeting.
V. Old Business
    a. Committee Chairs for 2003
        i. President: Michelle Tuson
        ii. President-Elect: Dr. Mary Jo Drew
        iii. Secretary/Treasurer: Patricia Fedoronko
        iv. Members at Large: Margaret Wilde and Margaret Stoe
    b. Newsletter
        i. More people need to be involved
        ii. Needs more structure
            1. Plan the Newsletter for a year at a time and present ideas at a board meeting
            2. More people should be involved in the Newsletters, especially for the Spring Flyer
VI. New Business
    a. Nominating Committee: Composed of past president (Chairperson) and Senior past presidents. Committee nominates Committee Chairpersons and Board Members.
    b. Membership Committee needs more structure.
    c. Education Committee Workshop
        i. Eliminate manager's workshop
        ii. Keep the wet/dry sessions
    d. Reviewed changes made by the membership to the MABB By-Laws
    e. Audit of the MABB was discussed
VII. Meeting was adjourned at 5:10 pm.

Respectfully submitted by:
Patricia Fedoronko, Secretary/Treasurer

Transfusion-Transmitted West Nile Virus (WNV)

by Bruce Newman, MD
Medical Director
American Red Cross SE Michigan Region

West Nile Virus (WNV) was first detected in the United States in the New York City area in 1999. The virus is harbored in birds and spread by mosquitoes. Horses and humans are coincidental hosts and are not the reservoir for the infection. Due to migration of birds, the endemic area has expanded and now includes 43 states. Between 1999 and 2001, there were less than 66 cases per year, but in 2002, by October 30th, there were 3,419 confirmed or probable cases.

Although recently, it has been documented that blood donors and organ donors can transmit WNV infection, mosquitoes still transmit 99.9 to 99.99% of all infections. WNV infection is seasonal in northern climates with the risk period being between mid-July and mid-October. The incubation period after a mosquito bite is 2-14 days. Clinically, 80% of those infected have no symptoms whatsoever; nearly 20% have mild symptoms consistent with a cold or flu; and 0.6 to 0.7% (1 in 150) develop serious central nervous system illness. Although all age groups are equally infected, serious disease is most common in individuals over the age of 50 years, and the average age for fatalities is in the high 70's. Symptoms of serious disease can include fever, headaches, stiff neck, mental status changes, fatigue, muscle weakness, paralysis, and difficulty walking. There is significant disability for those with severe disease; one year after the New York epidemic, 67% still had fatigue; 50% had memory loss, 49% had difficulty walking; 44% had muscle weakness; and 38% had depression. Infected persons become immune to WNV within a couple of weeks after the onset of symptoms, and there is no carrier state. Current American Red Cross policy advises that infected persons can donate 56 days after diagnosis (or after 28 days by FDA standards).

In Michigan, 483 persons (400 serious) have been confirmed to have WNV infection through laboratory tests; it is estimated that there are 60,000 cases overall, with 80% in SE Michigan, and 40 persons have died. Laboratory diagnosis is usually based on a cerebral spinal fluid (CSF) sample. The most sensitive test is the WNV IgM antibody test on CSF, which is positive in 90% of patients with CNS disease within eight days of developing symptoms. RNA is only detected in 50-55% of cases and often disappears with the onset of symptoms. Viral cultures are positive in only 10% of cases. The diagnosis can also be made on serum, usually with the IgM antibody test, but a second sample with a 4-fold increase in titer is needed to prove recent infection.

Transfusion transmission was suspected after a transfused organ donor was documented to have infected four organ recipients in August 2002, and transfusion transmission was proven in a Mississippi patient and two Michigan patients in September 2002. In terms of prevention, there is no FDA-approved test for mass donor screening. The virus can be present in the blood for three to five days and is at its peak just before the onset of symptoms. A WNV nucleic acid test (NAT) is needed to detect asymptomatic infectious donors, but since the virus is at very low levels in blood, each individual unit needs to be tested. Blood centers cannot test individual samples in a timely manner until NAT technology changes from a semi-automated to a fully automated process. The CDC and FDA hope to have a test in place by next summer. An alternative future approach to prevent transfusion transmission is to chemically inactivate any RNA and DNA present in a blood component. Such chemical inactivation could kill viruses, bacteria, and parasites and would be able to prevent emerging agents from contaminating the blood supply. There are, however, challenges for this approach which include throughput on a mass scale, patient safety related to the chemical agents, adverse effects on the blood component, expense, and validation of efficacy. In the meantime, the message to donors concerning the reporting of signs and symptoms after blood donation has been strengthened. There is no risk when the WNV season is over and potentially affected components have expired. Potentially, "at-risk FFP" can be exchanged with "no-risk FFP" when the risk period is over.

Investigations:

When a blood center is informed of a WNV patient who has been transfused within 28 days of the onset of symptoms, an active investigation is initiated. The investigation begins with a quarantine of all implicated co-components in both the blood center and hospitals. Co-component dispositions are determined. Then, donor samples (segments, co-components, or fractionated plasma) are gathered and sent to the CDC for WNV NAT and WNV IgM antibody tests. As of October 28th, there are 33 active investigations in the United States. It is difficult, however, to prove a case because most patients have also been exposed to mosquitoes. Two scenarios have been designated by the CDC as being strong evidence for proof of transfusion transmission: 1. one unit infected two or more patients; and 2. the patient was isolated from mosquitoes and developed a WNV infection after transfusion.

To summarize, transfusion-transmission of WNV cannot be completely prevented during the WNV season, but cases are still rare because of the short viremia period. New technology is needed to prevent infections during the WNV season. Post season, there is a point where newly collected blood becomes WNV risk-free. Finally, a proper perspective requires one to state that 99.9 to 99.99% of all cases are transmitted by mosquitoes, not by blood or organs.

Treatment of Autoimmune Hemolytic Anemias

By Mary Jo Drew, MD
Division Head of Transfusion Medicine &
Medical Director of the Blood Bank • Henry Ford Hospital

This article is one of a series of reviews of topics presented at the 2002 combined annual meeting of the South Central Association of Blood Banks and the California Blood Bank Society, held in Las Vegas, Nevada, April 18-20, 2002.

Larry D. Petz, M.D., Chief Medical Officer, StemCyte, Arcadia, CA, presented an update on the therapy of autoimmune hemolytic anemias and methods of selecting blood components for these patients. Dr. Petz' take home message was that blood should never be denied a patient with a justifiable need, even though compatibility testing may be strongly positive. His opinion is that the greatest hazard to these patients is the physician's reluctance to transfuse because fully "compatible" blood cannot be found.

He suggested guidelines for transfusing these patients, based on how frequently transfusion would be indicated. If the patient's Hgb is >10 gm/dL, transfusion is rarely indicated. At a Hgb level from 8-10 gm/dL, transfusion is usually not necessary. In the range of 5-8 gm/dL, transfusion may be necessary, depending upon the acuity of the patient's anemia, his/her ability to compensate for the anemia, and comorbid conditions. Below 5 gm/dL, most patients will require transfusion to maintain adequate oxygen-carrying capacity.

Of course, transfusion in these patients carries with it some risks. Among these is that the patient's autoantibody will cause shortened survival of the transfused RBCs. Alloantibodies may also be present, and difficult to detect on pretransfusion testing. Some risk also exists from the increase in RBC mass due to transfusion.

Dr. Petz feels that a major obstacle in transfusing these patients is communicating with clinicians regarding the blood products available. He is not in favor of using the term "least incompatible", as this causes confusion among clinicians. Another concern is that using "least incompatible" blood as a substitute for detecting and determining specificity of alloantibodies. In addition, there is no firm data that there is a clinical advantage to selecting "least incompatible" blood. Dr. Petz recommends the following message be conveyed to clinicians concerning units to be transfused to these patients:

- Alloantibodies have been excluded; there won't likely be an alloantibody-mediated HTR
- RBC survival will not be normal due to autoantibody—will cause transfused RBCs to have same survival as patient's own RBCs
- Acute and severe reactions are not likely

Dr. Petz then presented some recommendations for the workup of these patients. When feasible, warm autoabsorption is still the optimal technique for detection of possible alloantibodies in these patients. As a rule of thumb, the number of autoabsorptions can be determined by the strength of the DAT. If the DAT is 1+, one absorption is performed, if DAT is 2+, two absorptions, etc. If the DAT is 4+, three or more absorptions may be needed. This technique should not be used if the patient has been transfused in the last 3 months, unless pre-transfusion RBCs from patient are available.

As far as determining the specificity of the patient's autoantibody, Dr. Petz indicated that identifying alloantibodies is more critical. It is still a matter of controversy whether selection of blood based on "relative specificity" of an autoantibody for, say, the Rh antigens, really helps the survival of the transfused RBCs.

Ideally, of course, patients should be completely phenotyped prior to their first transfusion, as once transfusion has occurred, it may be impossible to determine the patient's phenotype accurately. If the extended phenotype is known, and if antigen-negative blood is readily available, using these RBC units may be as safe as performing alloabsorptions on previously transfused patients. Of course, consideration should be given to using these rare units for patients who have not yet developed alloantibodies and may never do so. Rare units transfused to alloantibody negative patients "prospectively" are then not available for patients who are already immunized.

Dr. Petz then briefly reviewed the options outside of transfusion for management of patients with autoimmune hemolytic anemias. Corticosteroids, splenectomy, immunosuppressive drugs, and IVIG have been used with success in some patients. Less well-established therapies include plasma exchange, danazol (a synthetic androgen), and peripheral blood stem cell transplantation.

In spite of the difficulties encountered in managing these patients, their prognosis is far better today than that documented in studies from the 1950s and 1960s. At that time, reported mortality was 27-38% in WAIHA. One report from the 1990s indicates that there is now a 91% survival rate one year after diagnosis, 76% at five years, and 73% at 10 years. The prognosis in children is better, as 80% have acute, transient disease.

MICHIGAN ASSOCIATION OF BLOOD BANKS
P.O. Box 3605 • Center Line, MI 48015-0605

MABB Member Survey:

Since the individual members are the backbone of the MABB, we would like to give you a chance to voice your preferences. What blood bank problems would you like to solve in a four hour wet workshop? This must be simple enough for the beginner, yet challenging enough for the seasoned blood banker.

1. _____
2. _____
3. _____

Please forward your ideas to Janet Silvestri in the MABB Administrative Office via e-mail at janet@hfcc.net or U.S. mail at:

P.O. Box 3605
Center Line, MI 48015-0605

Ortho-Clinical Diagnostics