IN A DIFFERENT VEIN

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PRESIDENT'S MESSAGE

By Suzan Bowers, MT(ASCP)SBB



There's an old saying that "all good things must come to an end" and that is my feeling about my year as the MABB President. It was a very good year and I am truly sad to see it end. As always, the highlight of the year's events is the Annual Meeting. This years meeting, held on September 19 and 20 at the VisTaTech Center at Schoolcraft College, was once

INSIDE THIS ISSUE

•	President's Message 1-2
•	53rd Annual Meeting—Were YOU There???? 2-3
•	MABB Business Meeting Minutes4
•	More Moments from the Annual Meeting5
•	ABO Incompatibility Verification Testing6
•	Probable Suppression of Fetal Erythropoiesis 7-8
•	Vendor Thank You Note & Photos9
•	Special Thanks
•	Send Articles To Editors
•	MABB Contact Information
•	2007 MABB Officers

again a great success. For that I have to thank Dr. Laura Cooling, our President-Elect. She put together a program that was both educational and entertaining. I was especially delighted that she "brought back by popular demand" the posters displays. Scattered around the dining room were a number of posters that were en route to the AABB National meeting. The feedback from our vendors is very positive. They all love the venue and can't wait to come back next year. I've been told by a number of them that we have the best state meeting and for that we can all be proud. Special this year were the tribute to Kay Beattie and the roast of John Judd in honor of his retirement. The slide show for Kay reminded us all what it means to be a blood banker. The slide show for John reminded us all of what fun you can have being a blood banker, even a world renowned one. Following the roast John gave one of his classic lectures and as I listened I was reminded how privileged we are to have him as a member of the MABB. Sharron Zimmerman was awarded the Founder's Award and Terry Downs was given an Outstanding Service Award. Both well deserved. As for next year's meeting, we've already booked the VisTaTech Center. So save the date, Sept 17th and 18th, 2008.

On another education note, the Education Committee was busy making plans for the fall RAP sessions. First the MABB joined with Southeastern Michigan ARC to host a RAP on preparing for ISBT on Nov 7th at the ARC. After that we returned to Gaylord "by popular demand" on November 30th to host a serology RAP. I can't thank Terry Downs and her Education Committee enough for all their efforts this year to continue to bring education opportunities to upstate blood bankers.

I put up a flip chart at the annual meeting asking for volunteers for our committees and was pleased with the results. My theme this year has been new involvement and we have it! There were two new members at our last Education Committee meeting, two new volunteers for Archives and a new volunteer to Publications. So I can leave office knowing that we are staffed for success.

Next year I remain on the Board as the Past President and so I look forward to my continued involvement in MABB. I want to thank the current Board for their support and for their friendship. I also want to thank Lisa Tyzo, the MABB Administrative Assistant and Bethany Neldrett, our Webmaster, for their dedication to making the MABB a successful organization. As I turn over the reins to Dr. Cooling and look back on 2007, I am pleased with how the year went and proud to have been a part of the MABB.

Continued on Page 2...

Fall 2007 In A Different Vein

Continued from Page 1...

These are excerpt from my speech at the meeting.

Founders Award

The 2007 Founder's Award was presented to Sharron Zimmerman. The award is not awarded every year given but rather only when deemed appropriate by the Board. It is awarded to a member or past member who has contributed to the success of the organization by actively working on committees and projects. Sharron was the president of MABB in 2000 and has served in various education activities including the Northern Michigan Teleconference. She has been an active member of the Annual Meeting Planning Committee, traveling from upstate to attend. She is a Wayne State graduate, completing her internship at Hutzel. She completed the Wayne State SBB program. She has been on the faculty at Wayne State. She worked at Hutzel Hospital, then Munson Medical Center and then on to Michigan Community Blood Center-Northwest where she is the General Operations Manager. On a personal note she is married with two children. I am told that she will be leaving in January to join her husband in South Africa and hopes to work with the AABB International efforts in the blood banks there. The MABB will miss her professionally and personally.

Outstanding Service Award:

With the Board's approval I decided to award an Outstanding Service Award to Terry Downs. This award is not a part of our By-Laws and was awarded to Terry because she truly has given this organization Outstanding Service this year. She first took over the Education Committee when I vacated to move on to President-Elect and has done an fantastic job. Last year she agreed to become our Treasurer and has really brought our bookkeeping up to date. What makes this so outstanding is that when I couldn't find a replacement for her as the Education Chair, she agreed to continue and manage both positions. You can not imagine the commitment it takes to do both jobs. In addition she works full time at the U of M as a blood bank supervisor and has a family to care for. I am so

appreciative that she made such a huge commitment.

WERE YOU THERE? - 53rd Annual Meeting

By Laura Cooling MD, MS

HOLD THE DATE

54th MABB Annual Meeting:

September 17 -18, 2008

The annual fall meeting of the Michigan Association of Blood Banks was held September 19-20 at Schoolcraft College in Livonia. The challenge and title of this year's meeting was "Will you be there?" and the answer for many was, "Yes!" We had good attendance with approximately 100-120 attendees each day. We also had terrific vendor support this year with 20 companies purchasing space to display their wares. Both PACE and physician CME credits were provided to participants.

Our 2007 Kay Beattie lecturer was Gail Coghlan from the Rh Laboratory, University of Winnepeg, Manitoba, Canada. Gail was introduced by Janice Hamilton, past president of MABB and a student of Kay Beattie. Jan gave a moving 10 minute pictorial memorial of Kay, in honor of her death this year of cancer. To paraphrase Jan, 'how appropriate that this year's recipient is Gail. Like Kay herself, much of Gail's work has involved going out and collecting samples from family members'. Gail also added a few personal remembrances of Kay Beattie. For the Kay Beattie Lecture, Gail spoke on "Why bother with lows?". Gail gave a second lecture on "Gene mapping and family studies". This lecture showed the evolution of blood group and gene identification from family studies and chromosomal linkages to more advanced methodologies using gene chips.

Another popular speaker this year was Lt. Col. Jack Hager, who recently returned from Iraq where he operated a plateletapheresis unit for a major field hospital. His lecture was entitled "Providing blood

Continued on Page 3...

In A Different Vein Fall 2007

Continued from Page 2...

products for trauma patients in remote and combat environments". His lecture received very high marks from our attendees and stimulated 10-15 minutes of questions.

Amy Dixon, a hit from last year's meeting, returned this year for a fun hour of "Attitude Adjustment". As part of her lecture and standup comedy routine, Amy showed the FISH video of the famous Seattle Fish Market. As always, Amy was extremely entertaining and to the point about the relationship between attitude and fulfillment at work.

Of course, no MABB meeting could be complete without John Judd. MABB brought John Judd out of his very short, 3 week "retirement" to speak on "Top 10 mistakes in antibody identification". Prior to John's talk

was a short session of "Blood Bank Jeopardy" with Michelle Tuson as host and John Judd and Sharon Cisco as contestants. Unknown to John and most of our attendees, the session was actually a roast in John's honor. Questions were asked in Jeopardy format but the answers were accompanied by highly incriminating and often politically-incorrect photographs of John that had been collected from several individuals around the country. At the end of the session, John was given emeritus status from the MABB Board and a bottle of his favorite whiskey.



Laura Cooling, Sharon Cisco, and **John Judd**, our enthusiastic Blood Bank Jeopardy panel.

In addition to John, this year we honored Sharon Zimmerman (MCBC) with the Founder's Award for her long service to MABB. Sharon will be moving to South Africa this spring. She will be sorely missed.

As always, there was a good mix of serologic and clinical cases presented. Serologic case studies were presented by Pam Cornwell (UM, Ann Arbor), Andrea Davis (St. Joseph, Ann Arbor) and Dorothy Diefenbach (Ingham Medical Center, Lansing), who presented a case of a prenatal anti-Di^a. Clinical cases included a misdiagnosis of DIC in a patient with argatroban toxicity (Dr. Malti Kshirsagar) and two related cases in which TTP was considered the diagnosis (Dr. Jason Carvahlo and Dr. Barbara O'Malley).

One new addition edition this year was poster displays. Although posters were a part of MABB meetings in the past, they had fallen to the wayside over the ensuing years. This year 3 posters were displayed from both Henry Ford and University of Michigan. We are hoping to continue this tradition for future meetings. If you present posters at AABB or other meetings this year, please consider sharing them with our members at next year's MABB meeting, which is scheduled for Sept. 17 and 18.

And finally, I cannot end this letter without special thanks to several individuals. These include Suzanne Butch and Dr. Sherwin Imlay, who coordinate the provision of PACE and physician CME credits, respectively. Karen Gizzi, our exhibitor liason. Webmaster Bethany Neldrett, who designed our new meeting brochure. Dr. Lee Ann Weitekamp, who was on an extremely tight schedule yet still agreed to give a wonderful talk on TRALI. Lisa Tyzo, Michelle Bensette, Terry Downs, Sue Bowers, Linda Cardine, Allison Henstock and Jim Fiedor who helped with registration. Janice Hamilton, for her work on Kay's memoriam. Michelle Tuson and Sharon Cisco for their help in "Blood Bank Jeopardy". And, of course, our faculty speakers.

We look forward to seeing you at next year's MABB Annual Meeting!

Laura Cooling MD, MS Chair, 2007 Annual Meeting

MABB ANNUAL BUSINESS MEETING MINUTES

Michigan Association of Blood Banks Annual Business Meeting Minutes September 19, 2007

Call to Order at 1320 by Sue Bowers, President

Board member reports

1. Allyson Henstock: Secretary. Allyson is stepping down after serving as secretary for three years.

2. Terry Downs: Treasurer.

Financial Report: Fiscal Year Report 7/1/06-6/30/07

Income: \$38,558.98 Outflows: \$29,463.22

NOTE: Monies must be maintained at a level to cover emergencies. One example would be the need to cancel the annual meeting with monies already owed.

Motion to Approve the Financial report was unanimous.

Committee Reports

- Terry Downs: Education Committee Chairperson. Three RAP sessions were scheduled in 2007. They were for "Unannounced Inspections" in Southfield in April; one upcoming in November for Implementation of IST 128, November 7 at Detroit Red Cross. A RAP in Gaylord is being planned.
- 2. Mary DePouw: Publication Committee Chairperson. There were three issues of *In A Different Vein* in 2007. The next issue is due in October. Editors and reporters are needed. Questioned how many received and were able to open the attached newsletter from the website. Sandra Hoffman has been helpful in soliciting articles and photos.
- 3. Sue Bowers for Bruce Newman: Archive Committee Chairperson. All boxes of archive materials are in boxes at Dr. Newman's house. Volunteers are requested to help with the organization of these valuable materials.
- 4. Sue Bowers for Linda Cardine: Bylaws Committee. There is no activity in this committee at this time. Several changes are being contemplated.
- 5. Sue Bowers for Bruce Newman: Membership Committee Chairperson. Total membership is stated as 145 individual, 20 institutional, 10 corporate. There are 2 emeritus members.
- 6. Laura Cooling: Nominating Committee. President Elect, Suzanne Butch; Secretary, Barbara O'Malley; Members at Large, Sharon Lowry and Sherwin Imlay. Motion to approve nominations was unanimous.

Awards

- 1. Kay Beattie Award to Gayle Coughlin
- 2. Founder's Award to Sharon Zimmerman
- 3. Outstanding Service Award to Terry Downs
- 4. President's Award to Sue Bowers

Motion to Adjourn at 1340.

Respectively submitted by, Allyson Henstock, Secretary Michigan Association of Blood Banks

Dr. Cooling congratulating Suzan **Bowers** on a great year as President.

Suzan Bowers presenting Terry Downs with an award for Outstanding Service In A Different Vein Fall 2007

MORE MOMENTS FROM THE 53rd ANNUAL MEETING



Hoffman, and Farheen Shah-Khan

Diagnostics

ABO INCOMPATIBILITY VERIFICATION TESTING

By Jason Wholehan

MSU Intern

June 11, 2007

ABO Incompatibility Verification Testing

Audit Plan A.07.02

Purpose:

This audit is to determine if ABO incompatibilities will be detected using the I.D. Micro Typing System gel testing. **Methods/Procedure:**

To verify ABO incompatibility detection major crossmatches using Red Cross red cell units and patient plasma will be performed using the MTS anti-IgG gel cards.

Red Cell Unit selection: One hundred and five donor units were tested in this audit. The distribution of units to be tested was based, approximately, on the AABB population incidence of ABO blood types; 64 A units, 28 B units, 13 AB units and no O units.

Patient selection: Fresh EDTA patient samples, <48hrs old, were selected for use in the study. Twenty patients of groups O, A, and B were selected. Each patient was tested against several incompatible units, around 3-7 units for each sample.

Results:

The results are as follows in the data table:

Units	Patients	Incompatible	Compatible
A units	O patients	32	0
Aunts	B patients	32	0
B units	O patients	14	0
D utilis	A patients	14	0
	O patients	3	0
AB units	A patients	5	0
	B patients	4	1

One hundred and four of the one hundred and five tests were incompatible. The one compatible test was a B patient crossmatched with an AB unit. To discern the cause of this unexpected compatible crossmatch additional testing was performed.

Compatible result, additional testing and results:

First, the patient and the donor unit were retyped. They remained the same ABO types; patient = B and donor = AB. Next, the samples were re-crossmatched using the gel test, and they remained compatible. Then, an immediate spin crossmatch in a test tube was performed, and it remained compatible. Finally, the donor unit was A_1 antigen typed using A_1 lectin. The donor tested A_1 negative. Also, this patient tested incompatible against two other AB units with slightly weaker results of 2+ and 3+. The patient's reverse type with A_1 cells was 3+ reaction.

Summary:

ABO incompatibilities were easily detected using MTS gel testing, except for the one sample encountered in this study. The likely reason for the compatible test was that the donor's ABO antigen has a subgroup of A. The B patient's anti-A may have been weakened as well.

Interestingly, since this incompatibility was not detected by immediate spin either the only method of crossmatch that would have detected this incompatibility was a computer crossmatch.

This study demonstrates that MTS gel testing is a useful method of compatibility testing, but it also showed a shortcoming. This study also stresses the utility of computer crossmatch, as it was the only method that detected the incompatibility of donor red cells and patient plasma which could have caused an adverse transfusion reaction.

In A Different Vein Fall 2007



PROBABLE SUPPRESSION OF FETAL ERYTHROPOIESIS BY ANTI-Kpa



M Tuson, K Koval, R Desai, G Garg, S Imlay, E Kazem, St. Joseph Mercy Hospital Oakland, Pontiac MI; D Stockman, J Hamilton, American Red Cross-Southeastern Michigan Region, Detroit MI

BACKGROUND

KEL system antibodies in the circulation of a pregnant female have been documented as causing hemolytic disease of the newborn (HDN). Severe HDN caused by anti-K has been associated with lower levels of antibody titer, hyperbilirubinemia, and reticulocytosis than seen with anti-D HDN. The anemia seen in these infants is thought to be caused by suppression of fetal erythropoiesis possibly by immune destruction of erythroid precursors². Vaughan et al found that proliferation of K+ erythroid progenitors was inhibited by anti-K suggesting that K glycoprotein plays a role in erythropoiesis⁸. This mechanism has rarely been reported for other KEL system antibodies. This case reports apparent red cell suppression by maternal anti-Kp^a in one of two twins.

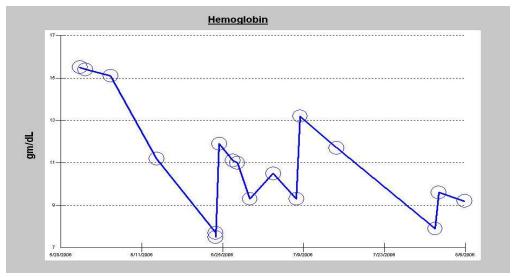
CASE HISTORY

A 31year old G3P2 female with a history of a negative antibody screen delivered fraternal twins at full term (37 weeks gestation). At delivery, the cord hemoglobin was 10.2 gm/dl for Twin A (male) and 17.0 gm/dl for Twin B (female). Twin A received an immediate single aliquot red cell transfusion compatible with maternal serum.

Anti-Kp^a was ultimately identified. Results of other serological testing are in the table in the laboratory results section.

Twin A received an additional single aliquot transfusion with red cells on day 1 and was discharged on day 5 with a hemoglobin of 15.1 gm/dl. Absolute reticulocyte count was normal at this time. Transfusion was again required on day 25 when the hemoglobin reached a nadir of 7.5 gm/dl with a decreased absolute reticulocyte count of 0.007 m/mcl. Additional transfusions were given on days 30 and 39 to maintain a hemoglobin above 9.0. The infant's bilirubin peaked at 5 mg/dl on day 1 and fell steadily over the monitoring period. WBC and platelet counts remained normal. Antibody screening on days 25, 30 and 39 demonstrated persistence of anti-Kp^a in baby's serum.

LABORATORY RESULTS		Mother	Twin A	Twin B	Father
	ABO/Rh	A positive	A positive	A positive	A positive
	DAT	not tested (nt)	4+	Negative	nt
	Indirect AHG test	nt	nt	Compatible	Incompatible
	with maternal serum				
	Elution study	nt	Anti-Kp ^a	nt	nt
	Other studies	Anti-Kn ^a			Kn(a+)

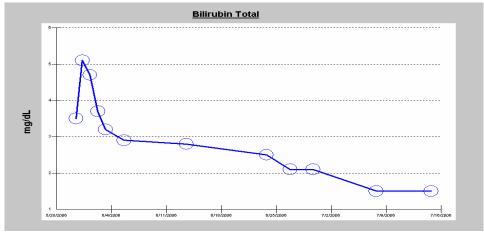


NORMAL RANGES: 0-2 days 14.6-22.7 gm/dl; 2 days-1 mo 13.2-21.3 gm/dl; 1-4 mo 9.8-12.9 gm/dl

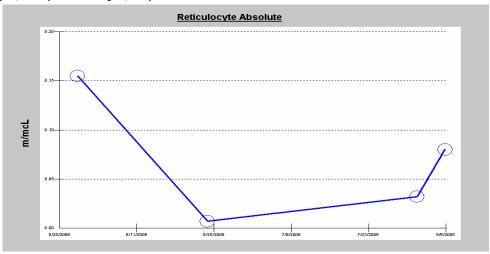
Continued on Page 8...

Fall 2007 In A Different Vein

Continued from Page 7...



NORMAL RANGES: 0-1 day 0.0-5.1 mg/dl; 1-2 days 0.0-7.2 mg/dl; 2-5 days 0.0-10.3 mg/dl; 5 days-adult 0.4-2.0



NORMAL RANGES: 0-2 wks 0.1250-0.3250 m/mcl; >2 wks 0.0160-0.1000 m/mcl

CONCLUSIONS

Anti-Kp^a is a rare cause of hemolytic disease of the newborn. Our laboratory findings support suppression of fetal erythropoiesis by anti-Kp^a rather than destruction of circulating red cells as the cause of the newborn anemia. The steadily declining bilirubin levels concurrent with a declining hemoglobin and decreased absolute reticulocyte count support evidence for this interpretation. A study by Daniels et al demonstrates that KEL system antigens appear on erythroid progenitor cells early in erythropoiesis³. Because erythroid progenitor cells do not contain hemoglobin, immune destruction of these cells by anti-Kp^a would explain the absence of hyperbilirubinemia in our patient. Interestingly there is restriction of Kell messenger RNA and protein to erythroid percursors thus explaining why WBC and platelet counts remained normal^{5,6}. The patient's anemia resolved in 3 months and hemoglobin has remained normal. Twin B had no post delivery complications and provides a biological control for factors other than maternal alloantibody as a cause of the anemia. Although anti-K is most commonly associated with erythropoetic suppression, our patient shows that other KEL system antibodies appear to have this capability.

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In A Different Vein Fall 2007

Fenwal, George Kelly

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Sarstedt, Justin Briggs sarstedt@bellsouth.net

Ortho Diagnostics, Ann Steiner & Ed DeRose ederose@ocdus.jnj.com

THANK YOU, VENDORS!!!

The MABB would like to thank all the following vendors who attended this year's fall meeting. Their support is vital to this meeting.

Not pictured...

- American Red Cross National Testing Laboratory, Stacey Walls
- Biotest, Bill Gruber Bill.Gruber@BiotestUSA.com
- Cardinal Health, Care Fusion, Troy McCann troy.mccann@cardinalhealth.com
- CSL Behring, Dale Weinberg dale.weinberg@cslbehring.com
- Gambro BCT, Shannon Smith shannon.smith@gambrobct.com
- Next Control Systems, Walter Kirichenko wkirichenk@nextcontrols.com
- Pall Medical, Jeff Weathers Jeffrey_Weathers@pall.com



MSA Marketing, Richard Myers msamkt@comcast.net



Michigan Community Blood Centers, Linda Barar lbarar@miblood.org



MedAlliance Group, Inc, Ted Beatty tbeatty@medalliancegroup.com



Mediware, Denise Deschaine denise.deschaine@mediware.com



Helmer, Amanda Arbuckle aarbuckle@helmerinc.com



Global Med Technolog.

BioArray Solutions, Jeff Horvat JHORVAT@BIOARRAYS.com



Greg Kessler Immucor Gamma, Kathy Shortridge kshortridge@immucor.com gkessler@dotscientific.com



American Red Cross, Mike Cortez, Angelo D'Anna and Sandy Lenneman Dannaa@usa.redcross.org, cortezm@usa.redcross.org, lennemas@usa.redcross.org

SPECIAL THANKS TO...

Special thanks to the MABB President and President-Elect, for all their diligent work and perseverance in putting together a terrific 2007 Meeting! Thanks to the Annual Meeting Committee, and congratulations on a successful meeting!

Special thanks to all vendors. Most especially, a BIG Thank You to all MABB members who joined us at the Meeting—without your attendance, the Annual Meeting is just not possible.



MABB President-Elect— Laura Cooling



MABB President—
Suzan Bowers

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SEND ARTICLES TO EDITORS:

The deadline for next issue is February 1st! Any photos submitted should be accurately identified with proper spelling of names.

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Bruce Newman, MD - American Red Cross

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