AVHTM Events at IVECCS 2019

During IVECCS last month in Washington, DC, the AVHTM had a booth in the exhibit hall featuring a new banner and brochures. Many people stopped by to learn more about the organization and to register as members. The AVHTM also hosted VECCSpert lectures this year on the extracorporeal therapy topics “IMHA – Classic and Novel Approaches to Management” and “Toxicities – Classic and Novel Approaches to Management” (both co-presented by Alessio Vigani & Alex Lynch), as well as “Platelet Transfusions” (presented by Thomas Edwards). Specialist lectures featured by AVHTM this year included “Novel Transfusion Products” (presented by Thomas Edwards), as well as “Total Plasma Exchange in Human Medicine”, “Biomarkers of Venous and Arterial Thrombosis”, and “Perioperative Management of Drugs that Affect Coagulation” (all presented by Gow Arepally, MD). The AVHTM Board is currently hard at work planning sessions for 2020, so if you have any suggestions for topics or speakers, please email Dr. Sarah Musulin (semusuli@ncsu.edu).

AVHTM Updates

Our group is continuing to grow – we have more than 280 members!

Please note that AVHTM membership fees will be increasing as of November 1st, 2019. Here is a breakdown of the new fees: $45 for veterinarians, residents, technicians, interns, and other people in the blood bank industry; $10 for veterinary or technician students (proof of student status may be requested). Also, the AVHTM has decided to sponsor a research grant starting in 2020. As such, you will be asked when you renew your membership if you wish to contribute any funds towards the grant. We encourage people to donate any amount they choose, which will be used towards a grant for research being completed in the field of hematology or transfusion medicine. Stay tuned for more information!

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The only blood system currently defined in the cat is the AB blood group system, consisting of the A, B, and AB blood types. This system is characterized by the well-recognized occurrence of natural anti-A and anti-B alloantibodies. The clinical relevance of these alloantibodies manifests as severe acute hemolytic transfusion reactions in type B cats receiving type A blood, as well as neonatal isoerythrolysis, whereby shortened survival of transfused RBCs in type A cats receiving type B blood is reported. Therefore, feline blood donors and recipients should always be blood typed before a first transfusion.

In 2007, a new feline erythrocyte antigen named Mik was recognized in a group of domestic short-haired cats after a type A-matched RBC transfusion resulted in an acute hemolytic reaction in a Mik-negative cat receiving blood from a Mik-positive donor. This study raised the question of the existence and the clinical relevance of other blood antigens independent of the AB system in cats. Since 2007, few studies on the existence of these antigens have been published.

In 2018, McClosky et al. documented major cross match incompatibilities in 14.9% of transfusion-naive cats that were typed according to the AB system. In another study, Sylvane et al. reported similar results with incompatible major cross matches in 19% of transfusion naive cats. Our prospective study focuses on feline blood antigens independent of the AB system. Our objectives are to determine the prevalence of feline naturally occurring non-AB alloantibodies detectable by gel column cross match, but also to identify these new antigens. We include transfusion-naive type A cats on which we realize cross matches by series of 6 individuals. Like the two previous studies, our preliminary results demonstrated the presence of natural alloantibodies in 13.8% of cats. Thanks to additional major and minor cross matches undertaken between seven cats with natural alloantibodies, four non-AB erythrocyte antigens have been identified. We would like to compare these new antigens with the Mik antigen to prove that one of them is the Mik antigen.

The Mik reagent, which is basically plasma/serum containing antibodies directed against the Mik antigen, is unfortunately no longer available. An alternative solution to this lack of reagent would be to find cats with a known Mik phenotype. We are therefore actively searching for cats with a known Mik phenotype (Mik-positive AND Mik-negative cats are of interest). Finding cats of known Mik status would keep this knowledge alive and maybe rehabilitate our capacity to test cats for this antigen.

If you have a cat or know of a cat that has previously been confirmed Mik-positive or Mik-negative, please contact Dr. Marie Binvel (marie.binvel@umontreal.ca) or Dr. Marie-Claude Blais (mc.blais@umontreal.ca) at the University of Montreal.
Recently Published Articles

The articles listed below are those published May - September 2019 in the field of veterinary transfusion medicine, blood banking, and hemostasis:

AHVTM is an IRS approved 501(c)(3) nonprofit professional association composed of veterinarians, hematologists, academics, veterinary technicians, blood bankers, and interested public who desire to further scientific advances in transfusion medicine and veterinary hematology.

We engage in veterinary research, promote industry standards, develop guidelines for canine and feline blood collection and processing, and publish scientific research in peer-reviewed publications.

Visit us online to learn more about AVHTM!

**AVHTM Updates** (continued from page 1)
AVHTM continues to be an active group on social media and within our private email group. Recently, our email group has shared discussions on several topics including equipment preferences (freezers, thawers, platelet agitators), xenotransfusion in ferrets, culturing of blood products, weight of PRBCs and plasma products, raw food diets fed to donors, and use of blood products for terminally ill patients. We encourage AVHTM members to continue using this fantastic resource by emailing questions or sharing ongoing research endeavors with the group. Please note that access to the Google Group is only for those with membership fees in good standing. Previous discussions can be accessed online signing into your Google account at [https://groups.google.com/](https://groups.google.com/).

We also have more than 870 followers on Facebook and have good engagement with our posts in terms of people liking or sharing them. Please ‘like’ or ‘follow’ us on Facebook ([www.facebook.com/AVHTM/](http://www.facebook.com/AVHTM/)) and feel welcome to post links, images, and questions pertinent to veterinary hematology and transfusion medicine.

**MEMBERSHIP BENEFITS**

As an AVHTM member, you are eligible for the following:

- Reduced IVECCS registration fee (veterinarians save $100 and technicians save $251)
- Access the a “Members Only” section of the AVHTM website, which includes access to:
  - Other AVHTM profiles
  - PubMed articles
  - Forum for posting questions, cases, and research
- Ability to ask and answer questions posted to the AVHTM members-only email group.

*Please feel welcome to share this newsletter with interested colleagues and encourage them to become an AVHTM member!*