Wound Management and Personalized Medicine

Did you know that all small animal wound management is not the same? A recent case at The Ohio State University Veterinary Medical Center (VMC) demonstrates why wound management requires veterinarians to treat each patient on a case-by-case basis.

In May this year, Hobbes, a two-and-a-half-year old Dutch Shepherd, was admitted to emergency at the VMC’s Hummel & Trueman Hospital for Companion Animals. He presented with scabs and peeling skin on the upper part of the face above his nose and more open wounds under his chin. Owners Cary and Kevin Frith of Athens, Ohio, suspected that Hobbes had been bitten by a wasp or hornet. “His nose and cheeks swelled and open sores began to develop,” says Cary.

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From the Director

I hope your fall season is off to a good start.

In this issue of Update for Veterinarians, we feature a case that highlights the important decision-making factors in wound care management for improving patient outcomes. Dr. Amy Zide, a surgery resident, explains how the emergency and soft tissue surgical teams helped successfully manage an unusual case.

We’re also happy to note that in September, the College of Veterinary Medicine opened a state-of-the-art Clinical and Professional Skills lab — the first-ever veterinary educational lab of its kind at Ohio State. This lab provides innovative, interactive training for students so that they learn to master clinical and professional skills in the first two years of their program. These learning spaces are near the Veterinary Medical Center (VMC) clinical areas to enhance the students’ active learning experiences. See images on page 3.

Finally, we’re excited to note that Dr. Georgina M. Newbold joins us as assistant professor in the Ophthalmology Service.

We welcome your continued feedback on our services and thank you for choosing the VMC each time you refer a patient in need of advanced care.

Karin Zuckerman, MHSA, MBA
VMC Director
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The Friths had initially given Hobbes Benadryl to reduce the swelling, but after the wound progressed, Hobbes’ veterinarian, Helen Rutter, DVM ’01, of Kroner Animal Care, referred the Friths to the VMC.

The Veterinary Medical Center emergency service team, led by Dr. Page Yaxley, clinical assistant professor of emergency and critical care medicine, examined Hobbes’ wounds and immediately placed him under general anesthesia to begin debridement of the tissue. “At that time, the tissue looked very unhealthy and macerated,” says Dr. Amy Zide, a third-year surgery resident.

Hobbes was given antibiotics and Dr. Zide took a culture for diagnosis. The surgical team placed initial tie-over bandages on the wound, which keeps the wound open as it starts to heal. Hobbes was sedated for nearly a week to keep him comfortable.

While Dr. Zide says the tissue sample suggested anything from snake venom to a cat bite, she notes there was no certainty as to what caused the wound, and that “Hobbes improved quite quickly with supportive care,” not even requiring the feeding tube once he came out of sedation.

The soft tissue surgery service team performed a staged reconstruction — using skin behind the ear as axial pattern flaps — at weeks two and three.

“For the flap, we cut the skin up on three sides and then sutured those same three sides down over the wound,” says Zide. The fourth side, the base of the flap, remained untouched in order to maintain blood flow.

The axial pattern flaps were selected in this case because they maintain blood flow to the skin from the nutrient artery,” she adds. “They are stronger and are more likely to live compared to other skin reconstruction methods.” Hobbes was lucky in that all the skin flaps lived, which is atypical, she adds, and not once did he need the feeding tube. “He ate quite well throughout his stay. Clearly, he has youth on his side.”

In addition to Dr. Zide, the surgical team included soft tissue surgeons Dr. Mary McLoughlin, associate professor, and Dr. Kathleen Ham, associate professor.

Post-surgery, Hobbes wore a full-head compression bandage wrap. He was in the intensive care unit for a total of six weeks, with the team keeping a close eye on his wound and providing daily bandage changes, which took an hour each day. The type of bandages used varied as Hobbes’ wounds healed, Dr. Zide says. Tie-over sutures were placed around the edges of the wound in order to allow the bandage to cover the wound. Additionally, part of the wound was left open to heal for the remaining period.

The lesson learned for veterinarians is that decisions about wound therapy must be made on a case-by-case basis, says Dr. Zide. “This is a good example of how fast wounds can progress — and every wound is different,” she points out. “Some will be easy to manage and can be closed early on, others need to be open for longer. You need to treat every wound as a new case.”

Hobbe’s positive outcome had an added surprise: During his hospital stay the VMC specialists kept the Friths aware of the possibility that Hobbes might lose his eyes, but in the end they were able to save them.

Now at home, and with periodic follow-up visits to the VMC, Hobbes has returned to his usual routines. The Friths are happy and relieved.

“What to Know about Wound Management

• Treat every wound as a new case
• Stabilize the patient
• Debride and protect the wound
• Determine whether open or closed wound management is appropriate
Clinical and Professional Skills Lab Nears Completion

We’re excited to announce that a state-of-the-art Clinical and Professional Skills lab will be opening at The Ohio State University College of Veterinary Medicine in early September. At the time of this writing, crews are putting finishing touches on this incredible space.

This clinical skills lab is the first-ever veterinary educational lab of its kind at Ohio State and is designed to offer first-and second-year students an opportunity to develop clinical and professional skills early in their program, with interactive experiences that emphasize active learning.

“The goal is to give students hands-on clinical practice and empower students to gain mastery of their abilities at their own pace,” says Dr. Tatiana Motta, who oversees the lab’s development. Dr. Motta is assistant professor of Small Animal Surgery in the Department of Veterinary Clinical Sciences.

The skills lab is adjacent to the Veterinary Medical Center (VMC). It has two main areas: one large instructional space with simulation models and technology equipment for 80 students; and seven smaller rooms, accommodating 10-20 students, designed for self-directed learning with 24/7 access. Among the lab’s interactive technology are Go Pro cameras and the use of 3-D printed bone models derived from real CT scans of VMC canine patients.

Updated Companion Animal Emergency Fee

Please note the following emergency fee and deposit information:

- $120 ER fee
- $80 Exam fee (waived if patient seen by referring veterinarian same day)
- $100 Deposit (all VMC hospital locations)

If you have any questions, please contact Dr. Doug Graham, VMC Practitioner Liaison, at graham.1131@osu.edu.

Save the Date

College of Veterinary Medicine Continuing Education

October 3 – Columbus
October 24 – Cincinnati
For more information, please visit: vet.osu.edu/alumni/continuing-education
Welcome New Faculty

Georgina M. Newbold, DVM  
Assistant Professor-Ophthalmology

Dr. Newbold is a 2014 graduate of the School of Veterinary Medicine at the University of California, Davis. She completed a small animal rotating internship at the University of Tennessee College of Veterinary Medicine, where she went on to do her residency in comparative veterinary ophthalmology. Dr. Newbold’s research interests include feline keratitis and post-phacoemulsification complications in dogs.

Transitions

The following individuals completed their residencies and now join the Department of Veterinary Clinical Sciences (VCS) faculty as instructors:

- **Dr. James Howard**, Instructor-Practice, Small Animal Surgery
- **Dr. Alison Kilborne**, Instructor-Practice, Equine Surgery
- **Dr. Joe Lozier**, Instructor-Practice, Farm Animal Medicine and Surgery

Blue Buffalo Veterinary Clinical Trials Office Seeks Participants

If you have a patient that might be eligible for any of the following trials, please contact our Blue Buffalo Veterinary Clinical Trials Office at: cvm-clinicaltrials@osu.edu or 614-247-8706.

**Dogs with Skin Mast Cell Tumors**

The study’s purpose is to identify the efficacy of corticosteroids in reducing microscopic mast cell tumor (MCT) burden. We seek new, evidence-based guidelines for the treatment of MCT, such as smaller surgical margin size, which could reduce the complications associated with surgery.

**Dogs with Forelimb Bone Tumor (Osteosarcoma)**

This study will assess the feasibility and safety of microwave ablation therapy for the treatment of distal radial osteosarcomas in dogs, measure the volume of treated tissue and record the presence of collateral damages (soft tissue).

For a full list of current trials, please visit: vet.osu.edu/vmc/clinical-trials.

Departures

Dr. Amy Schkeeper, Radiology, has left the college to join IDEXX in Totowa, New Jersey; Dr. Judith Bertran, Surgical Oncology, has left to join the University of Florida; Dr. Kathleen Ham, Soft Tissue Surgery, has left to join Michigan State University; and, in late September, Dr. Emma Warry, Medical Oncology, will be departing for Texas A&M University.

Find us on 📚

- The Ohio State University College of Veterinary Medicine
- The Ohio State University Veterinary Medical Center
- The Ohio State University Veterinary Medical Center at Dublin
Welcome 2018 Residents

Ashley Bendlin  
Ophthalmology

Matthew Cook  
Oncology

Crystal Doyle  
Small Animal Surgery

Alena Ferrigno  
Dermatology

Laura Johnson  
Radiology

Daniela Korec  
Oncology

Rebecca McBride  
Neurology

Alexis McLaine  
Small Animal Emergency and Critical Care

Matthew Miller  
Small Animal Internal Medicine

Andrew Muir  
Farm Animal Medicine and Surgery

Margaret O’Brien  
Behavior

Tingwei Ou  
Radiology

Vivian Quam  
Equine Surgery

Chloe Snell  
Small Animal Internal Medicine

Soscha Tencate  
Small Animal Emergency and Critical Care

Kathryn Timko  
Equine Medicine

Rebecca Urion  
Radiology

Geoffrey Zann  
Small Animal Surgery
Welcome 2018 Interns

Brittany Abrams  
Integrated (Surgical) Oncology

Alessandra Hamlin  
Small Animal Rotation

Kelsey Johnson  
Small Animal Rotation

Brianna Jordan  
Farm Animal

Leah Kruckman  
Small Animal Rotation

Brian Manly  
Small Animal Rotation

Hannah Manning  
Equine Field Service

Mackenzie Ruehl  
Small Animal Rotation

Richard Sheng  
Medical Oncology

Catherine Stecyk  
Small Animal Rotation

Nathaniel Violette  
Small Animal Rotation

Amanda Weaver  
Small Animal Rotation

Sara Weber  
Small Animal Rotation

Cally Webster  
Equine Field Service

Cathay Wu  
Small Animal Rotation