



EMERGENCY CARE

A young patient with an oral and tracheal thermal injury after chewing an electrical wire is an example of some of the cases critical care veterinary nurses manage.



MEET THE AUTHOR

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Finding Purpose in Critical Care

I entered the profession with some clear-cut expectations: I knew that general practice would not cut it for me and that I wanted to work in some sort of specialty. I also knew I wanted the opportunity for continual growth throughout my career. I lucked out shortly after graduation and managed to get my foot in the door with a part-time contract at the Ontario Veterinary College (OVC) Teaching Hospital. OVC checked all the boxes for me: there were so many challenging departments to work in and so much to learn from mentors who were leaders in their field. I was so excited!

Andrea graduated with a BS in Specialized Honours Zoology from the University of Guelph, completed the Veterinary Technician Diploma at the Ridgetown College Campus, and received her master's degree from the University of Guelph in Veterinary Clinical Studies. Andrea was an ICU technician at the Ontario Veterinary College Health Sciences Centre for 20 years before moving into a supervisory role of the ICU and Anesthesia departments. She achieved the VTS (ECC) certification in 2003. Andrea is also an experienced lecturer, speaker, author of multiple textbooks, and the executive secretary of the Academy of Veterinary Emergency and Critical Care Technicians and Nurses.

I spent a few months in the small animal wards, learning lots of great things like husbandry and the blood donor program, while honing my skills in venipuncture, restraint, pain management, and anesthetic recoveries. A position in anesthesia opened next, and I was thrilled to accept a 1-year full-time contract. I was provided the opportunity to develop anesthetic protocols, anesthetize challenging cases, and place IV catheters and arterial lines on a variety of patients.

THE OTHER SIDE OF THE WALL

One case that has always stuck with me involved anesthetizing a very sick dachshund named Holly. She arrived in our care with a necrotizing wound secondary to subcutaneous fluid administration with *Pseudomonas* species contamination. She lost a great deal of the tissue along her back and side and was in the ICU for over a month while the wounds were managed. The veterinary team anesthetized her daily to debride and clean the wounds and apply bandages (FIGURE 1). I was lucky to be the anesthesia veterinary nurse/technician working on her during many anesthetics. Holly was a particularly interesting case that I really only had a small part in each day. The other 22 hours of her day were spent on the other side of the wall in the ICU while the critical care team kept her alive through sepsis, wound management, and pain management. I spent much of my free time checking in on Holly and asking lots of questions.

Holly was a pivotal case for me because she really made me want to experience what happens on the other side of that wall. I found myself snooping around in the ICU and checking on patients I had anesthetized, as I really hated not being privy to their progress once I



FIGURE 1. Holly, a patient with a severe necrotizing wound secondary to contaminated subcutaneous fluid administration. This picture was taken prior to surgical debridement of the necrotic tissue.

I found myself snooping around in the ICU and checking on patients I had anesthetized, as I really hated not being privy to their progress once I handed them back.

handed them back. Through anesthetizing Holly I had the chance to meet and really get to know my mentor and life-long friend, Dr. Karol Mathews. Dr. Mathews is a diplomate of the American College of Veterinary Emergency and Critical Care and is well known for her pain management expertise and popular *Veterinary Emergency and Critical Care Manual*. She was service chief of the OVC ICU until her retirement. Dr. Mathews encouraged me to consider moving to the ICU if there was ever an opening.

That ICU opportunity finally arrived, and I jumped at it as my contract was soon coming to an end in anesthesia. I made a clear transition as I left a stable Monday to Friday, 9 to 5 position and suddenly started shift work (12-hour shifts, rotating days and nights) for the first time in my life. I absolutely loved it! I joined an incredible team in the ICU with experienced RVTs and VTSs in emergency and critical care who became my mentors, in addition to Dr. Mathews. I learned so much by observing how the other RVTs managed and thought through their cases and I absorbed all the tips and tricks they shared to help me be successful. This is what drove me to pursue my specialty in Emergency and Critical Care [VTS(ECC)].

WHAT IT TAKES TO SUCCEED IN CRITICAL CARE

I immediately realized that anesthesia and critical care, while requiring quite complementary skillsets, demand completely different mindsets. Anesthesia is very methodical—the goal is to have a plan, a clear set of steps to follow, but also be prepared for adverse events. Critical care, however, is much more fluid, and while we all try to create a plan, the patient does not often follow it. Instead, the critical care team is often reacting to unexpected changes in patient condition,



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monitoring the trends (good or bad), and endlessly playing catchup.

Focus and Discernment

The critical care veterinary nurse/technician is an essential part of the critical care team. They are often the person at the patient's bedside for their entire shift. Their responsibilities include the obvious: keeping the patient clean, comfortable, and pain-free; completing treatments; obtaining vitals; maintaining IV fluids; and measuring outputs (urine, vomit, drain fluids). What is less obvious, however, is the more subjective role that the critical care veterinary nurse/technician plays, including trending parameters and ensuring that vitals, outputs, etc. are all showing steady improvement. If parameters are worsening, it is the job of the critical care veterinary nurse/technician to notify the veterinarian immediately. In order to do this efficiently and knowledgeably, it is imperative that the critical care veterinary nurse/technician ensures they *understand* the disease process and the end goals, and that they ask the right questions.

Foresight

A critical care veterinary nurse/technician becomes excellent at anticipating next steps and will have everything prepared and ready to go without the veterinarian asking. The veterinarian must trust the veterinary nurse/technician will react quickly to changes and keep them apprised of the patient's status. They will frequently discuss changes in patient condition with the veterinarian and obtain changes in treatment orders. In an effective ICU, the veterinarian provides parameters to work within and the critical care veterinary nurse/technician makes it happen. In order to accomplish all these tasks, they must be focused, be

organized, and have the ability to think critically. It goes without saying that calculations are also a big part of the job and the critical care veterinary nurse/technician must learn to embrace, rather than fear, math.

Flexibility

Being willing and able to work nights and weekends is essential to the critical care field, as patients require 24-hour care. Night shift veterinary nurses/technicians should never feel that they are any “less” than their day shift counterparts. Instead, they should embrace the tremendous experience and opportunities granted on the afterhours shifts and use those experiences to grow as a professional. A veterinary nurse/technician who has done nights for 20-plus years has not “settled”—they have found their passion!

CAREER ADVANCEMENT

Critical care veterinary nurses/technicians have the ability to formally specialize as a Veterinary Technician Specialist in Emergency and Critical Care [VTS(ECC)], administered through the Academy of Veterinary Emergency and Critical Care Technicians and Nurses (AVECCTN, avecctn.org). This is an opportunity to prove knowledge and skills through a rigorous application and examination process, and apply that knowledge and expertise in other areas of the profession, such as management and teaching.

Veterinary nurses/technicians who are interested in joining a community of like-minded professionals should consider membership in the Veterinary Emergency and Critical Care Society (VECCS, veccs.org) or its sister organizations, the European Veterinary Emergency and Critical Care Society (EVECCS, eveccs.org) and the Latin American Veterinary Emergency and Critical Care Society (LAVECCS, laveccs.org). These memberships give access to the *Journal of Veterinary Emergency and Critical Care*, in addition to world-class continuing education opportunities such as the International Veterinary Emergency and Critical Care Symposium.

So, what moves me? Working with and learning from intelligent critical thinkers; challenging the status quo; teaching others what I have learned and what others have so generously shared with me; and working on that critical case patient that no one expected to survive and watch it go home. **TVN**