“New Advances in Animal Health Care”

Picture this. The patient is rushed to the emergency room for uncontrollable seizures. The emergency team quickly controls the seizures and stabilizes the patient. With in hours the patient is transferred to a neurology specialist who performs an extensive neurological assessment. This includes a CAT scan and MRI of the brain. All is found to be normal and the diagnosis of epilepsy is made. Sound like an episode right out of the TV show ER? Actually this is a relatively common scenario for a modern veterinary practice. It’s no mistake that this sounds very much like a human hospital scene.

The world of Veterinary Medicine has virtually exploded with information in the past 2 decades. New technologies and procedures have changed the way we face many animal health issues. Veterinarians are continually presented with new tools and information that challenge our way of thinking and our approach to patients. I thought it might be interesting, and indeed eye opening for some, to share some of the recent advances that benefit animal health today.

Modern veterinary science often “barrows” technological advances from human medicine and applies them, albeit in a slightly different way, to animal medicine. This is good. Human medical advances have always laid the groundwork for eventual application to animal health efforts. After all, why should our animal family members be left behind in the rapidly advancing field of medical science?

As a fledgling veterinarian many years ago I believed that to arrive at a correct diagnosis of an animal’s health problem one simply had to follow the right diagnostic steps until an answer was found. Seemed simple enough; you just had ask the right questions, order the right tests and viola! The answer would fall into your lap. It didn’t take me long to figure out that Mother Nature doesn’t always read the textbooks. Sometimes understanding why Poopsy won’t jump into grandma’s lap anymore isn’t always so simple.

Yes, the right questions need to be asked and the correct tests run, but sometimes the diagnosis remains elusive. New diagnostic tools have made it easier for veterinarians to get to the bottom of some of these problems. As you might guess many of these ”new’ tools are really not all that new. Human medical practices have had access to some of these technologies for decades.

One example of a diagnostic technology that is catching on in a big way in veterinary medicine is diagnostic ultrasound. . Using high frequency inaudible sound waves, ultrasound allows the clinician to visualize organs and tissues in a way that can dramatically affect the outcome of a pet’s health problem. Over the last 5-10 years ultrasound imaging (sonography) has become commonplace in veterinary practices across the country.

Flexible endoscopy is another relatively new tool for veterinarians. This technology uses long flexible scopes and fiberoptics (or in some cases miniature video cameras) to look into the gastrointestinal tract or airways of the lungs to better understand a pet’s health problems. Before endoscopy was available for veterinarians, surgery was the only way to get the information needed to help the patient.

Rigid endoscopes are a close relative to the flexible endoscopes only they’re not flexible. These rigid scopes are used increasingly in animal medicine to evaluate joints (arthroscopy), the abdominal cavity (laparoscopy), and thoracic cavity (thoracoscopy). In addition, many of these rigid endoscope systems allow for surgical procedures to be done with out major surgical incisions. Again, this may sound a bit “old fashioned” to you human medical professionals out there but it’s new and exciting to the animal health world.

Veterinarians have become especially interested in modern, accurate in-house laboratory equipment. These new instruments can provide information on patients within minutes, where before it might take hours or even days to get that same information. In an emergency or critical care situation this can make the difference between life and death.

During my conversations with pet owners I will get all kinds of varied responses when talking about these valuable tools and how they can be applied to pets. Some are astounded that such things are available for animals, while others ask why it took so long. I get the most surprise from pet owners when we talk about the increasing availability of Magnetic Resonance Imaging, or MRI, for animals. This truly incredible tool allows specialists to see into the brain, spinal cord, and other soft tissues with incredible detail. I wouldn’t expect to see an MRI unit at your regular veterinarian’s office any time soon, but access is available through UC Davis and large referral practices.

Animals today don't only benefit from exciting diagnostic tools; they also enjoy many kinds of therapeutic advances as well.

Critical patient care for the severely injured or ill pet is an area of veterinary medicine that has seen tremendous advances. Pets that were once thought to be hopelessly sick are often given a second chance. Veterinary cancer specialists are prolonging the enjoyable, comfortable lives of many pets with cancer. Veterinary dental specialists are saving diseased teeth in pets with root canals and other advanced dental procedures. At the UC Davis School of Veterinary Medicine dogs with severe Hip Dysplasia can receive a total hip replacement and cats with failing kidneys can, in some cases, receive a kidney transplant.

These are just a few examples of how pets are benefiting from medical advances. The inevitable and legitimate question always comes up "how much does all this cost?" There's no doubt that these special diagnostics and treatments come at a price. These options are not for every pet owner, or budget, but they are available for those pet owners who want to pursue them.

I suspect that Veterinary Medicine will continue to make great advances in the years ahead; primarily because the greater pet owning public will continue to ask for, or in some cases even demand, the highest level of medical care for their pets.

Dr. John Huebner practices companion animal medicine at Redwood Veterinary Hospital in Vallejo, CA. You can send your pet health questions to Dr. Huebner in care of the Vallejo Times Herald, (440 Curtola Parkway, Vallejo CA. 94590) or e-mail him at RdWdVet@aol.com.