

Kristin E Spring BS, CVT, VTS(ECC, Anesthesia), CVPP

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Speaker's Bio

Kristin Spring graduated from UC Davis with a Bachelor of Science degree in Animal Science and Management in 1998. After working in general practice for a few years as an unlicensed technician she took on a second job in an emergency hospital and found her calling. She challenged the boards and became a certified technician in 2001. Kristin continued to learn and challenge herself and became a veterinary technician specialist in emergency and critical care in 2007. She began working as the surgery technician at her hospital and subsequently earned her veterinary technician specialty in

anesthesia in 2011. Through the International Veterinary Academy of Pain Management she became a certified veterinary pain practitioner in 2012. She is part of a national veterinary response team and was deployed to the Hurricane Sandy relief effort to work in the ASPCA shelter for displaced pets in late 2012. In her spare time (every weekend) she is training as part of a canine search and rescue team with her dog Gus.

Cardiovascular and Respiratory Anatomy and Physiology

Oct 2010 DoveLewis Annual Conference

Abstract

This presentation takes a look at the anatomy and physiology of the cardiovascular and respiratory systems with a bias toward how to handle anesthesia for patients with compromise to these systems. Although this seems like a basic topic, even the advanced technician can benefit from a review of these systems. Having a solid understanding of these broad topics is a crucial when nursing any ill patient whether anesthetized or not. First we will take a look at the cardiovascular system including a review of blood flow, what makes the heart tick, and some basic dysrhythmia identification. Next we will review of the respiratory system and its challenges. We will take a look at upper versus lower airway compromise and the challenges we face when anesthetizing these patients. Finally the presentation will discuss how these two systems affect each other.

End Tidal CO Who?

March 2013 Newport Oregon Coast Traveling CE

Abstract

This lecture is about monitoring end tidal CO₂ in the anesthetized patient and why that is important. I discuss the different monitors that may be used to monitor the ventilation status of an anesthetized patient and by briefly touching on the basics of arterial blood gas definitions I explain why using a capnometer is superior to the rest. Differences between respiration and ventilation are discussed. The lecture then moves into the discussion

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of the differences between the side stream and main stream capnometer devices and the pros and cons that come with each of them. Finally capnometry is introduced. I demonstrate the normal capnograph and break down its parts in order to interpret an abnormal capnograph. The lecture is concluded by going over several abnormal capnographs for interpretation and group discussion.

Bugs Wounds and You

May 2013 Oregon Veterinary Technician Association lecture series

Abstract

This lecture discusses types of wounds and physiology of wound healing. Wound treatment from triage through treatment modalities is discussed. I talk about iatrogenic wounds that are created when medical professionals place invasive devices for treatment and monitoring. A lot of time is spent discussing guidelines for nursing care and handling of these devices including the surgical incision, IV catheter, chest tubes, feeding tubes, tracheostomy tubes, urinary catheters, and care for the recumbent patient to prevent oral, ocular, and integumentary tissues from breaking down into wounds. Finally a case study is presented regarding a patient who was treated for narcotizing fasciitis with VAC therapy.

"Traumatic Anesthesia"-How to Safely Anesthetize many types of Trauma Cases

October 2012 DoveLewis Annual Conference

Abstract

I love the challenging cases! I should make it clear that this lecture is about patients suffering from traumatic injury that require anesthesia, not the technician in a cold sweat and having nightmares about monitoring a thoracotomy! This presentation spends a good amount of time going over the different body systems and how they can be affected by trauma. Next we discuss options for pain management and anesthetic protocols for trauma patients. Finally the presentation will go through a handful of case studies to practice what has been learned. The goal of this lecture is to encourage critical thinking and make these challenging cases less traumatic for the technician.

Pearls of Wisdom Regarding our Senior Patients-Pain Management, Nutrition, and Home Nursing Care

March 2013 Newport Oregon Coast Traveling CE

Abstract

Our veterinary patient base is getting older. This is partially due to our advances in veterinary health care, but also due to the relatively new idea that pets are a part of our family and deserve preventative medicine to keep them healthy. We need to remember that old is not a disease but a stage of life. It is financially beneficial to our veterinary hospitals to encourage a senior health care program. We can help guide our clients through this stage of life and by doing so we build stronger relationships and foster the human animal bond. As medical

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professionals there are metabolic changes our senior patients are experiencing that we need to keep in mind in order to provide good health care. Pain management is a large part of senior health care. It is important to realize that osteoarthritis is a progressive disease and that one treatment regimen will not continue to work as the disease progresses. Owners need to be prepared for changes to treatment plans and that these changes do not mean treatment failure, but progressive disease. We can empower our clients to do many things for their senior pets at home to make them as comfortable as possible and to allow them to continue to be a part of their family until the very end.

"What is a Chem Panel Anyway?"-Explaining Blood Chemistry and its Value to Technicians

November 2003 DoveLewis Mentorship Program

Abstract

Technicians are most often the ones to draw a blood sample and may also be the individual to run the lab work if they have access to in house lab equipment, but do we really understand what the numbers mean when the machine spits them out? This lecture discusses many of the chemistry values assessed in our patients. The attendee will gain an understanding of which organ each chemistry evaluates and why. We will also discuss what it may mean if that particular chemistry value is abnormal. This lecture should empower technicians to use their critical thinking skills, encourage them to challenge themselves to become more engaged in their work, and know when it is important to alert a doctor to a lab value.

I Plead the Fifth: Pain as the Fifth Vital Sign

June 2013 DoveLewis Traveling Lecture Series Bend Oregon

Abstract

Pain left untreated can have a large impact on the healing process and lead to a chronic condition. Technicians playing their role of patient advocate can play a large role in helping to diagnose and treat pain. This lecture defines pain and discusses types of pain. This presentation introduces different types of pain assessment tools to assist the technician in scoring pain and encourages the attendee to try a few out and adopt one for their hospital.

TIVA: Turning Off the Gas!

June 2013 DoveLewis Traveling Lecture Series Bend Oregon

Abstract

There are times when our patients cannot tolerate gas anesthesia. There are other times when having a patient on inhalant anesthetic is not ideal. This presentation introduces the idea of running anesthesia on constant rate infusions of injectable anesthetic alone. Total Intravenous Anesthesia is not a new concept but one that most technicians are not comfortable with. This lecture discusses the CRI and how to make one, anesthetic drugs

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ideal for TIVA, situations where TIVA is ideal, and what to do when your plan doesn't work. The presentation finishes with a discussion of a case of a septic cat that needed seven different CRIs for two hours to get her through her life saving surgery.

Chronic Pain: Assessment and Treatment September 2012 Community Lecture Series Portland Oregon

Abstract

Chronic pain is a dynamic and terminal process. It is important when treating a patient with chronic pain that we set this idea up for the client early on in the disease process. The well informed technician can make a big difference assisting the owner in ensuring the greatest quality of life for their pet with chronic pain. This lecture discusses the assessment of chronic pain in our patients, and how to help our clients assess for changes at home. Treatment of chronic pain with pharmaceuticals, nutraceuticals, exercise, and supplements is discussed. This presentation also discusses alternative therapies such as low level laser, acupuncture, and massage. A key point in this discussion is how to help our clients set up an environment at home to make nursing care of the patient with chronic pain as easy as possible.

Local Anesthesia Techniques for Technicians October 2011 DoveLewis Annual Conference

Abstract

Local and regional nerve blocks are an important but often forgotten part of a multimodal anesthesia plan. Local anesthesia techniques are relatively easy to perform and local anesthetics are really inexpensive. This lecture discusses local anesthetics, their uses, and their contraindications. Many nerve blocks are presented in a step by step fashion with photos for guidance. The attendee will understand why multimodal anesthesia is important, be able to choose an appropriate local anesthetic, and perform proper regional block technique.

Septic Abdomen-Case Based Approach to Surgical Management and Recovery October 2010 DoveLewis Annual Conference

Abstract

This presentation discusses the septic abdomen patient in a case based approach. First the relationship between SIRS, DIC, MODS, and sepsis is explained in general terms. A brief discussion about when to suspect sepsis, diagnosis of the septic patient, treatment of sepsis, and prognosis follows. The second half of this presentation goes through two septic abdomen cases from diagnosis through recovery and the complications in between.

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"Pain Management"-Pathophysiology, Assessment, Treatment

October 2009 DoveLewis Annual Conference

Abstract

This lecture discusses why it is so important that we treat pain. Terms and concepts relating to pain management are introduced. Types of pain and ways to assess pain are discussed. The pain pathway is explained thoroughly in this presentation. Things that may cause pain in the hospital environment and what causes our patients the most pain is an important part of the lecture. The greatest part of the lecture goes on to discuss different analgesics and their use as related to the pain pathway and the concept of multimodal pain control.

Vacuum Assisted Closure (VAC) Wound Therapy

February 2014 Ontario Veterinary Technician Association Conference

Abstract

This lecture discusses the history and theory behind vacuum assisted closure wound therapy. Mechanism of action is discussed along with the indications and contraindications of VAC therapy. Case reports and photos of this therapy in action are referred to throughout the presentation. The attendee should gain an understanding of how this therapy works to treat and heal wounds. We will discuss general nursing care of a patient receiving VAC therapy and what the cost might be compared to more traditional wound therapy treatments.

Case Report: Multiple Magnet Ingestion Resulting in Gastrointestinal Perforation and Omental Abscessation in a Young Rottweiler

September 2010 IVECCS

Abstract

Four magnets were ingested by a young Rottweiler. It is presumed that they drew toward one another from different lumens as they made their way down the GI tract and necrosed (eventually perforating) the GI walls trapped between them. At the time of patient admission, no published reports could be found of GI perforation due to multiple magnet ingestion in small animals. Several reports were found regarding similar incidents in small children. Small animal reports have been published since this case was seen. This case report goes through the development of shock and sepsis that this patient experienced. The attendee should gain a basic knowledge for the signs of shock, and its relationship to sepsis, how to initially treat shock and anesthetic protocols for the septic surgical patient. This lecture also addresses the patient nursing and handling of a septic patient in the ICU through recovery.

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Demystifying the Anesthetic Ventilator

December 2011 VetWrap

Abstract

This lecture is intended to demystify the anesthetic ventilator. The mechanics of different types of ventilators are discussed as well as the benefit to the patient and anesthetist when a ventilator is used. Bullet points within this lecture include the indications and contraindications to using an anesthetic ventilator, how to set up and pressure check the ventilator, how to monitor a patient on the ventilator, what physiological changes your patient may encounter while on the ventilator, and how to get the patient breathing on their own again.

Publications and other Accomplishments

- Case Report: Multiple Magnet Ingestion Resulting in Gastrointestinal Perforation and Omental Abscessation in a Young Rottweiler-Veterinary Technician Magazine 9/2011
- "Practicing Safer Anesthesia" www.atdove.org 9/2011
- "Anesthesia for Dental Procedures" www.atdove.org 2/2013
- Training Videos for On the Floor at Dove
 - Brachial Plexus Block
 - Canine Endotracheal Intubation
 - Microchip Implantation
 - NG Tube Placement Intra op
 - Anesthesia Induction and recovery

Professional Interests

- Anesthesia
- Analgesia
- Critical Care nursing
- Trauma
- Geriatric patient care
- Patient advocacy
- Disaster medicine

Professional Memberships

- VECCS
- AVECCT
- AVTA
- IVAPM
- NAVTA
- OVTAA
- NVRT-4

References

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