Acupuncture in Performance Horse Medicine: A New Look at an Old Technique

Beth Frank, DVM  (Certified in Veterinary Acupuncture)

Acupuncture is the insertion of small needles into specific points on the body to cause a desired healing effect. This technique has been used in both human and veterinary medicine for at least 3000 years. Used either by itself or in conjunction with Western medicine, veterinary acupuncture can assist the body to heal itself by affecting certain physiological changes.

Acupuncture is mainly indicated for functional problems such as those that involve pain, inflammation, muscle spasm, or arthritis and paralysis. Common conditions that acupuncture can be utilized in treatment of include: musculoskeletal problems associated with lameness, gastrointestinal issues (non-surgical colic, diarrhea), respiratory disorders (hoarse, nose bleeds) and reproductive problems (infertility).

Acupuncture works by influencing the central nervous system and affecting all physiological systems in the body. It increases circulation and causes the release of endorphins, which can eliminate pain, relieve muscle spasms, stimulate nerves, stimulate the body’s immune system, as well as many other beneficial effects without the side effects of drugs.

Needle insertion feels like a pin prick, which most animals tolerate well and often times will become relaxed and sleepy. The needles used are sterile, thin stainless steel needles, and acupuncture is a very safe therapy if practiced by a competent acupuncturist.

The length and frequency of treatment depends on the condition of the patient. Treatments can take between 15 minutes to an hour. There are many ways of stimulating the points including needling, electro acupuncture (a small electric stimulus is added to each needle for additional stimulation), acupuncture (injecting a solution into a point) or moxibustion (heating the point). Frequency of treatments can range from weekly to bi-annual treatments depending on the animal’s response.

Welcome Dr. Frank!

Comstock Large Animal Hospital would like to introduce our new intern Dr. Beth Frank. Dr. Frank is a native of Cupertino, California. She received her Doctorate of Veterinary Medicine from Colorado State University in 2007. Following graduation, she was an attending veterinarian at CSU's Equine Reproduction Lab where she gained extensive experience in advanced reproductive technologies.

This experience has allowed her to be eligible to sit for the theriogenology boards in 2009. Dr. Frank is certified in veterinary acupuncture and has used her skills in conjunction with traditional treatments for performance horse medicine and pain management. She is interested in pursuing a surgical residency upon completion of her internship. Her professional interests include orthopedic surgery, lameness, and acupuncture. In her free time, Dr. Frank enjoys riding her horses and working cattle. We are excited to have Dr. Frank join us this year!

COMSTOCK LARGE ANIMAL HOSPITAL
90 W. Laramie Drive  Reno, Nevada 89521
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Fall Client Education Seminar: Winterizing Your Horse
Saturday, September 20, 2008 @ 10:00a.m.
Due to the success of our spring seminars, we have decided to host a fall seminar covering everything you and your horse will need to make it through another Nevada winter. We will cover recommended vaccination and deworming protocols and equine dentistry. Our surgeon, Dr. Kelly Marobian, will discuss different types of colic, treatment, and prevention. As always, the seminar will be free and held at the clinic. Refreshments will be provided so please RSVP by September 10th.

“Loose Horses Sink Vets”
When working on horses in a field setting, safety is paramount for all involved. We kindly request that animals being worked on are led out of their paddocks away from the other horses. If the animal cannot be moved, the remaining loose horses should be secured in a separate paddock. We thank you sincerely for your cooperation.

Other News:
Congratulations to Meghan Galleron on passing her state and national veterinary technician board examinations. Meghan graduated in May from Truckee Meadows Community College with an associate degree in veterinary technology and completed her externship at CLAH in July.

Equine Dentistry Q&A
Kelly N.M. MacLellan B.Sc., M.Sc., DVM, M.Vet.Sc., Dipl. ACVS

Q: Does my horse require regular dental care?
A: Yes, a horse’s mouth changes significantly over its lifetime and can be the cause of several clinical problems including weight loss, headache, lameness and unexplainable behavioral changes.

Q: How often should my horse receive dental care?
A: Like people, horses have deciduous (baby) teeth. Twenty four of these teeth are shed over a 2 year period. Due to the large number of permanent teeth erupting between 2.5 and 4.5 years old, several potential problems can arise, and it is advisable to have a veterinarian perform an oral exami-
nation every 6 months, regardless of the horse’s age or necessity of dental work to be done.

Q: What are caps and why do horses have them? Do they have to be removed?
A: Caps are the terms given to the premolar deciduous (baby) teeth which are worn out and will be replaced by permanent adult teeth erupting underneath them. The majority of caps shed uneventfully as part of the aging process, but problems can be associated with impactions or retained cap fragments. Early removal of caps may lead to premature dental disease and tooth decay later in your horse’s life.

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A to Z Surgical Procedures

Currenty available at ComStock Large Animal Hospital

If you have any questions regarding any surgical procedures not listed please feel free to call our office at the hospital.

- Angular Lamb deformities in foals
- Arthrotomy joint procedures
- Biopsies (surgical and excisional)
- Coda
- Dental Extractions
- Enucleations or eyelid repairs
- Fracture repair
- Gastrointestinal tract approaches
- Hernia repair
- Joint deformities
- Lavage and debridement
- Lesion (laceration and abrasions)
- Local anaesthetics
- Joint Arthrodesis
- K. Other surgical procedures
- L. Laser surgery and aesthetics
- M. Minor wounds
- N. Nasal lacerations or injuries
- O. Orthopedic procedures
- P. Perineal muscle repair and removal
- Q. Quota of the collateral cartilages
- R. Rotor's back and upper airway surgery
- S. Sacral removal and treatment
- T. Trephination of the sinuses
- U. Unilateral abscess and abscess repair
- V. Vaginal reconstruction from fading injuries
- W. Wound and laceration repair
- X. X-rays and physical exam
- Y. Y-Fractures
- Z. Zebra if you have these!

Pre-operative Preparation

Once a surgery is determined to be the appropriate treatment modality, the patient is held off feed for approximately 12 – 24 hours, which allows the animal to breathe better under anaesthetic gas. The animals are thoroughly groomed, hooves cleaned and wrapped, along with a mouth mask to allow placement of the endotracheal tube. An intravenous catheter is then placed in the jugular vein of the neck to facilitate administration of drugs during, prior and post-operatively.

General Anaesthetic Induction

The animals are given an intravenous sedation which allows them to be calm when entering the surgery suite. They are then placed in a padded induction area where they are restrained for their safety until they are completely in a surgical plane of anaesthesia. The horses are then moved with the assistance of an overhead hoist to the padded surgical table. The state of unconsciousness is then maintained by placing an endotracheal tube to allow gas anaesthetics to be delivered to the lungs.

Under Anaesthesia

Blood pressure monitoring of the horses is accomplished by placing a second catheter in an artery, which gives the anaesthesiologist an indication of how well they are doing during the surgery and what adjustments if any need to be performed. Serial blood gases are drawn during surgery and processed in our laboratory to assess oxygenation and breathing as well as electrolyte balance. If necessary the animal can be placed on a mechanical ventilator to improve gas flow.

Surgical Preparation

While the anaesthesiologist is stabilizing the patient, the circulating surgical nurses are preparing the animal for the appropriate surgical procedures. This includes a sterile prep of the area of interest. During this time the surgeon and assistant surgeons are scrubbing and gowns for the procedure. Once the surgeon enters, the room nurses assist in draping of the surgical areas and setting up the appropriate instruments and equipment.

The Surgical Procedures

Horses requiring surgery are categorized according to the procedure and their physical status. Elective-surgery is those scheduled in advance such as mass removal, arthrotomy joint procedures, and castrations. Emergency procedures are those life threatening conditions such as colic, caustic sections, and infected joints or traumatic wounds. All horses undergoing a general anaesthesia are at risk of complications; however, those with life threatening injuries or colic associated gastrointestinal diseases are at greater risk.

Recovery

After completion of the surgical procedures, the patients are placed on a padded mat on their left side with head and tail ropes. These ropes will help facilitate the animal standing when ready. Once the gas anaesthetics have been turned off, the patient is allowed to breathe straight oxygen to help remove the excess gas anaesthesia from their lung. After the patient is awake enough to swallow, the endotracheal tube is removed, and they are allowed to breathe normal room air again. Patients are then assisted using ropes and pulleys to stabilize weak muscles after being under general anaesthesia. Once the patients are fully aware of their surroundings, they are moved to their stalls.

What to Expect When Your Horse Requires Surgery?

Kelly N.M. MacLellan B.Sc., M.Sc., DVM, MVSc., Dipl. ACVS

At ComStock Large Animal Hospital we offer a full range of surgical procedures including emergency and elective. On initial presentation all animals are given a complete physical examination, and in-house laboratory blood work is performed including a CBC (Complete Blood Count) and Chemistry. This allows our veterinarians to be aware of any pre-operative abnormalities which can be corrected prior to the general anesthetic event.

Equine Dentistry Q&A, continued from page 1

Q: What does it mean when horses teeth are floated? Are power instruments really necessary to float horse teeth?

A: The term floating comes from the carpentry definition meaning to “level or smooth rough edges.” Today we prefer to use the term “Dental Equilibration” which implies removing sharp enamel points that may cause pain to the soft tissues of the mouth and to evaluate and correct any asymmetry or imbalance of the teeth when necessary. Power equipment is not necessary to correct abnormalities in a horse’s mouth. However use of such equipment will greatly decrease the time the animal needs to hold its mouth open, and it will allow your veterinarian to perform more accurate corrections in a shorter period of time, resulting in less sedation and stress to the horse.

Q: Should equine dentistry be performed by a vet?

A: Yes, only a licensed veterinarian is qualified to isolate and perform veterinary procedures on your horse. We must be aware that dentistry and procedures associated with teeth for the well being of the entire animal and not just its teeth. Qualified veterinary specialists and those veterinarians with a keen interest in equine dental procedures are an excellent place to start.

At ComStock Large Animal Clinic we offer a wide variety of diagnostic services including internal medicine consultations, radiography of the skull, sinuses and teeth, as well as advanced dental surgical procedures under standing and general anaesthesia for more difficult problems such as molar extractions and endodontic procedures. Regular dental assessments by your veterinarian are an integral part of preventing dental disease and maintaining the overall welfare of your horse’s health.

Fall Vaccine Clinics:

Fall is just around the corner and that means fall vaccine clinics are nearing. The clinics are days we provide routine healthcare for your horses, and the farm call is greatly reduced. Vaccines like the worming, health care, and dental exams will be offered following a required physical exam. Separate dates will be scheduled as necessary for dentistry. We ask that you call our office to reserve an appointment for the day(s) listed when we are in your area. We will call you back a few days before your reserved appointment to give you an estimated time when we will be at your address. Please keep in mind that occasionally emergencies occur making it necessary to reschedule your appointment. We do appreciate your patience when this happens. In order to help us hold our on the schedule, we ask that you have your horses caught, halted and ready for your visit. Please remember that we have many horses to treat in a day and are often unable to satisfy requests for specific appointment times or diagnostic/treatment other in depth issues.

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