



birth to weaning

rearing a healthy foal

Eight tips to successfully rearing a foal from several days of age to weaning:

1. **Nutrition** - Foals are able to utilize almost 100% of the energy from mare's milk. However, beyond the first few weeks of life, milk alone is not sufficient to cover the nutritional needs of the foal. Foals should start to receive hard feed or access to grass at approximately ten days of age. Foals should receive around 0.25kg per day per month of age of hard feed. Foals should gain 1-2kg of weight per day. It is equally detrimental for a foal to gain too much weight, as it is to not gain enough. You should be able to see a foal's ribs until it is weaned.



2. **Limbs** - Some foals are born with limb deformities. These can vary from very subtle to severe. These deformities included contractures or laxities and angular deformities. These conditions can be present at birth or they can develop later. Some conditions will resolve on their own and others will need veterinary or farrier intervention. Have your vet do a conformation assessment within the first week of life.

3. **Farrier** - If a foal's conformation is correct, the first foot shaping and trimming should usually be done around one month of age. If any limb deviations exist it may be wise to get this done sooner. Regular trimming should be done as a matter of routine every four to six weeks thereafter.

6. **Parasite control** - Most foals should receive their first dose at six to ten weeks of age. This may be sooner if parasites are likely to be a problem. The specific strategy that you use for parasite control should be developed with your veterinarian and will vary depending on your specific farm management and risk factors.



5. **Vaccinations** - Mares should have been vaccinated four to six weeks prior to foaling to optimize colostral antibodies. This will help to protect the foal until it receives its own vaccinations. In New Zealand all foals should be vaccinated for Tetanus and Strangles. Begin vaccinating foals at around four months of age. Additional vaccinations may be recommended depending on the environment in which your foal is being reared.

4. **Other abnormalities** - It is important to examine your foal within the first week of life for physical abnormalities. Some of these include hernias, dental malocclusion, and eye abnormalities. The most common hernias seen in foals are umbilical hernias. Colt foals should also be checked for scrotal hernias. Hernias require veterinary attention and are best discussed with your vet. Over or undershot jaws or wry mouth can vary greatly in degree, but more severe ones may affect the foal's ability to chew and eat properly. Entropion is the folding in of the lower eyelid and if it is persistent may lead to ulcers of the eye. Your veterinarian should be able to assist you in correcting this problem. Any other abnormalities that you find should be discussed with your vet.

7. **Heat stress** - Foals are more susceptible to developing heat stroke or stress than adult horses. It is best to have mares and foals in an area where there is easy access to shade especially on hot days. Heat stress can also occur during transport. If you do need to move your mare and foal it is best to do it during the cooler hours of the morning or evening.

8. **Weaning** - Foals are normally weaned between four and six months of age. Earlier weaning should only be done for medical or nutritional reasons on consultation with your veterinarian. Foals should not be left nursing for more than six months. By four months, foals have little nutritional reliance on the mare's milk as long as they have been provided with good quality feed and pasture. It is normal for foals to be a bit anxious for the first five to seven days post weaning and they may lose some of their appetite. Make sure they have palatable feed and clean pasture available to them.

feeding the barren

early pregnant non-lactating mare

Both of these classes of mares have the same nutrient requirements as a mature horse at maintenance. You do not need to overfeed them! Approximately 80% of the growth of the foal occurs in the last four months of pregnancy so your aim is to maintain the mare's body condition. Therefore, if good quality pasture or hay is available, the normal mare should need no extra feed other than a good quality vitamin and mineral supplement. Obviously if pasture is limited or the

weather gets cold and wet then supplementary energy will be required. This is when a concentrate feed may be added but you should not need to exceed 3kg for the average mare unless you are trying to put weight on. Under dry conditions Vitamin A from pasture declines and again a supplement may be needed. Also be wary of Ryegrass Staggers in susceptible individuals under those conditions and consider a mycotoxin binder.



OFF THE bridle

summer 08-09

MVS Equine

MatamataVeterinaryServices

news update

As another year draws to a close it is hard to believe that our Equine Hospital has been running for nearly four years, and our sterile operating theatre has been in use for over a year.

New equipment purchased has been well received by clients, such as our digital x-ray machine, now used routinely on site and at yards and stables. It will be used through the coming Yearling Sales Series, making a previously tedious job more efficient. Also, our Platinum Performance Supplement has exceeded all expectations and client feedback has been phenomenal.

We farewell Mark Knobbe (who returns to the US in time for Christmas) and Natalie Bowler. Both helped us through the busy season and we wish them all the best in their next endeavours.

Our website is now up and running. You will find useful links, information on our hospital and all our previous newsletters so check it out on www.matamatavets.co.nz.

xmas greeting

On behalf of the team at Matamata Vets Equine we would like to take this opportunity to thank you all for your support throughout the year and wish you all a very Merry Xmas and all the best for the coming year.

Over the holiday period we are closed for routine procedures 25 and 26 December, 1 and 2 January but we continue to provide 24/7 emergency care.



referring vet evening

Recently we held an evening at our Equine Hospital aimed at referring vets and their clinic staff from around the Bay of Plenty, South Waikato and other neighbouring areas. The evening was well attended and included a hospital tour and a series of informative talks given by our resident vets David Howes - lameness examinations and nerve blocking in horses, Susanne Dykgraaf - colic examination and when to refer to surgery and Jason Lowe - nutritional supplementation for health and performance. We look forward to continuing our relationship with these vet clinics that refer cases to our hospital.



Jason Lowe

Susanne Dykgraaf

David Howes

dental and worming Special

Routine dental examinations form an important part of keeping your horse healthy. It is necessary to remove sharp enamel points, to improve chewing (which enhances digestion of feed), to alleviate stress on abnormally worn teeth and to prevent any discomfort associated with the bit.

We are offering a summer special (until 31 March 2009) whereby you can get your horse's teeth examined PLUS a worm tube drench for a total of \$100. (Visit fee not included where applicable).





tendon injuries

what is a tendon?

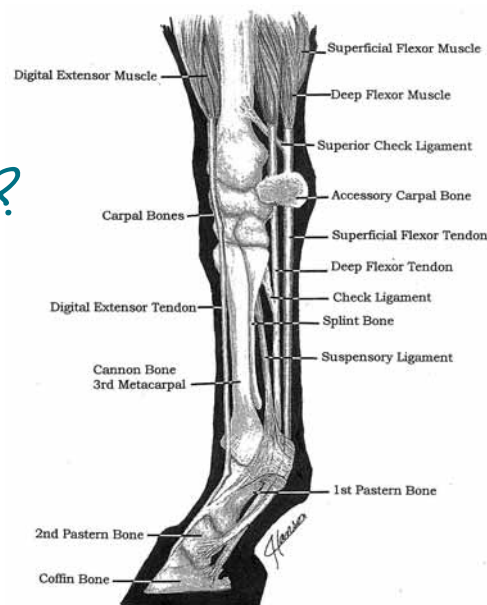


Figure 1: The flexor and extensor muscles and tendons of the foreleg. (Illustration by Judy Hanson)

Additional factors that may predispose a horse to SDFT injury, include conformation, working surfaces, shoeing, training methodology, and fitness in relation to the level of exercise being undertaken.

Clinical Signs include localized heat and swelling which is painful to direct digital palpation. Lameness may be present but is frequently absent especially in mild injuries. The profile of the tendon may appear 'bowed' (or convex) when viewed from the side.

Diagnostic Ultrasound is the best way to assess the extent of the injury, it's type and severity. High quality images are essential for an accurate diagnosis and prognosis and both legs should be scanned at the same time. Ultrasound is also an excellent tool in the management and rehabilitation of tendon injuries.

Recently, substantial progress has been made in understanding the nature of tendon injury and the mechanisms of healing. During repair, injured elastic tendon fibers are replaced with fibrous scar tissue resulting in a tendon repair that is never totally normal. Therapy is therefore aimed at trying to maximize the amount of functional tendon healing that does occur.

Treatment in the acute phase (2 weeks) is aimed at reducing pain and inflammation with anti-inflammatories, rest, cold water and bandaging.

The next stage (2 weeks up to 12 months) is aimed at trying to restore a normal fiber alignment and enhance the quality of the repair tissue.

Traditionally this has involved anything from doing nothing (ie retirement or uncontrolled paddock turnout) to regenerative therapies with controlled exercise, or even surgical intervention (superior check ligament desmotomy, tendon splitting, implants).

Tendons are tough yet flexible tissues that join muscle with bone, transmitting the forces from muscle contraction necessary to bring about joint movement and therefore locomotion. The basic structural unit is a tendon fiber (type I collagen) and it is the unique way that these line up and cross-link to each other that gives tendons their high tensile strength properties. When strain is increased beyond the tendons limit, structural changes occur and may lead to permanent loss of functional tensile strength. This is what we are trying to avoid or minimise in our treatment and management of tendon injuries.

Superficial Digital Flexor Tendon (SDFT) injuries predominately effect the forelimbs of horses that work at speed, especially racehorses and event horses. Other types of horses still incur this type of injury but less frequently.

platelet rich plasma (PRP) the latest in tendon treatment

PRP is the latest therapy available for tendon injuries and initial results are exceptional.

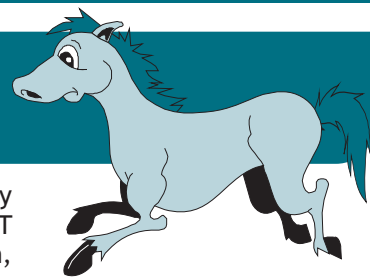
What is it? PRP is the result of processing whole blood from the same horse to obtain the fraction that has a high concentration of platelets. Platelets contain growth factors that enhance the access of healthy inflammatory cells into the area of tendon injury, and the formation of new blood vessels and connective tissue. PRP can therefore enhance and accelerate tendon healing and improve the quality of the repair.

When to use it? 7 to 30 days after the initial injury, ultrasound guided injection of PRP is performed. A gradual return to exercise with a controlled program is started with

follow-up ultrasound examination at 30, 60 and 120 days. If less than 50% improvement after 30 days, a second treatment can be performed.

Enhancing the healing response on a cellular and molecular level using PRP may improve the quality of repair, improve the prognosis for return to performance, and decrease the incidence of re-injury.

(PRP is suitable for other tendon and ligament injuries as well as SDFT tendonitis).



yearling and show preparation reminders

Our retail area has useful products for yearling and show preparation and have to take to the sales. The following is a reminder of some of these.

- ✓ **Shampoo** - our favourite and most popular continues to be Equi-Gold Eucalyptus Blue. Specially formulated to clean and enhance, leaving coats flat and shiny without the drying effects seen from frequent shampooing. The Eucalyptus oil acts as a fly repellent and whitens and brightens white socks. Available in 500ml, 5L or bulk stud sizes.
- ✓ **Hawthornes Freezex Hoof Freeze** - aids in preventing pain and soreness in horses' hooves. Apply at least two hours prior to races, parades, competitions or hard workouts. Freezex Hoof Freeze also helps to combat thrush and white line disease.
- ✓ **Wind Aid** - offers temporary relief of minor throat irritation and wind problems. Ideal to take to yearling sales where a change of environment, heat, dust and whinnying can result in throat irritation.
- ✓ **Equi Shine** - a coat shine and insect repellent in one. Perfect for parades and sales.
- ✓ **NRG No-Knots** - the best mane and tail detangler there is.
- ✓ **Effol Hoof Ointment** - conditions and shines hooves. Available in clear or black. Excellent for everyday use and parades.
- ✓ **Appetite** - formulated for picky eaters or horses off their feed.



- ✓ **Calming Agents** - Nupafeed has been used successfully in horses of all disciplines and is a particularly effective and innovative anti-stress calmer that does not affect performance. Easy to administer and given to horses before a stressful event i.e. parades or daily at the sales, and events. (No withholding).
- ✓ **Platinum Performance** - the complete "all in one" supplement ideal for yearling preparation situations, includes coat enhancers, conditioning proteins, joint care, bone and muscle building, hoof supplement, electrolytes, trace elements etc.
- ✓ **Dental Care** - often overlooked but vital to ensure yearlings parade well and reach optimum condition by digesting their food (see front page special for drench and dental special).



first aid kit

It's that time of year again when you are going on the road to shows, events and races. Are you prepared for those medical emergencies or know what to do until the vet arrives? The Equine Nurses at MVS have put together a list of first aid kit items you should take with you just in case;

- wound dressing (melolin)
- Permoxin- insect repellent spray
- electrolyte paste
- soffban cotton wool bandage
- iodide or chlorhexidine wash
- B-boost vitamin paste
- wound ointment
- duct tape (or similar strong tape)
- thermometer (digital or mercury)
- medicated swabs
- animal lintex poultice
- bandage scissors
- gamgee bandage
- vetwrap bandage
- elastoplast bandage
- sole-pac hoof putty
- dry swabs
- any prescribed medications

Although most organized events have a vet onsite during the day make sure you know where to get a local emergency number should the need arise.



In the event of heat stroke, pour or sponge large quantities of cold water over the back of the horses head (poll). This cools the horse more quickly due to the large blood vessels situated there.