



Senior Horse Challenges

Pain Recognition and Common Conditions

Keeping a horse comfortable into their senior years requires an attentive caretaker backed by a knowledgeable team. It is important to seek the input from your veterinarian and farrier to help maintain the health of an elderly equine and to spot conditions that will need special treatment sooner rather than later. Recognizing changes and not just dismissing them as “old age setting in” is a large part of the responsibility assumed when taking care of the senior horse.



Pain Recognition

- As a prey species, horses are predisposed to hide pain so as not to attract the attention of predators. Horses can be very stoic and not show the signs of pain until it becomes severe.
- Often the first signs of pain are changes in behaviour or attitude. For example:
- A horse that normally greets you at the front of the stall is now hiding at the back
- Rigid posture
- Guarding part of their body or reluctance to be handled
- Head lowering, squinting eyes, limp ears
- Teeth-grinding
- Increased flight behaviour
- Aggression
- More subdued than usual
- Decrease in responsiveness
- Flaring of nostrils
- Looking back at the flank
- Restlessness
- Stoic or pained expression, dull eyes
- Awkward tail carriage or aggressively swishing tail
- Decreased performance
- Reluctance to perform tasks which have already been mastered
- Reluctance to move

Recognizing pain is not always as obvious as the horse thrashing or rolling violently on the ground or the horse that is limping. The suddenly quiet, withdrawn horse may be suffering from the pain of a stomach ulcer or other non-visible ailments. It is important to resolve sources of pain early on. Chronic pain can cause depression and stress. It can also have a negative impact on appetite, the immune system, tissue healing and can increase the risk for developing gastric ulceration and colitis (inflammation of the colon).

Be on the lookout every time you groom for lumps, bumps, cuts, heat or swelling and pay particular attention if your horse displays sensitivity to touch. Also take note of any decrease in bowel movements as an early warning sign for colic. Knowing the baseline vitals for your horse is important to help you assess health. Equine Guelph offers a [16-point Horse Health Check](#) which takes approximately 5 minutes to perform.

Colic

Colic risk does increase in senior horses. Gut motility issues are more common in older horses, which can lead to an increased risk of impaction colic. Other issues in the senior gastro-intestinal tract which elevate the risk of colic can include tumors or increased parasite load. Older horses tend to have a reduced drive to drink and inadequate intake of water is also a risk factor. Difficulty in chewing feed can result in undigested food entering the gut which can also lead to gas or impaction colic.

Digestion is impaired if a horse is unable to grind food properly. Schedule regular dental check-ups with your veterinarian to make sure teeth are aligned with no jagged edges and your senior horse has a balanced surface to effectively grind food. If a change in feed is required due to difficulty in chewing; be sure to make these changes slowly to allow gut bacteria and enzymes a chance to adapt. For more tips on preventing colic visit Equine Guelph's [Colic Risk Rater Tool](#).

Dental Health

Extra diligence needs to be paid to dental health in the senior horse. Horses' front teeth continually erupt at an angle that increases as they age. Cases of unbalanced chewing surfaces escalate as the horse ages. Horses wear down their teeth as they chew but that wear is not always even. The development of sharp points in the mouth is much higher in the elderly equine and this can result in ulcerations, reluctance to chew their food, poor digestion and a higher incidence of choke. Severely uneven wear can lead to a condition called 'wave mouth'. Missing or loose teeth can lead to 'step mouth' which requires regular inspection and care as food can get packed in leading to dental disease, abscess or infection.



In very elderly horses, the teeth may lose their rough edges and become entirely smooth which results in an inability to grind food. Horses with smooth mouth should be fed highly digestible feeds that are easy to eat, such as soaked hay cubes or beet pulp – your veterinarian or equine nutritionist will be able to recommend the best course of management. Annual dental exams are recommended for all horses and twice a year for elderly horses. Foul odors coming from the mouth, nasal discharge, loose incisors, broken teeth, red or inflamed gums, quidding, weight loss, not finishing feed and resistance to the bridle are all reasons to call the vet and have the teeth checked. If you notice your horse is no longer chewing in a regular circular pattern this can be an indicator of sharp points and uneven wear which also warrants a vet appointment for dental care.

Maintaining good dental health into old age is probably one of the single best ways to encourage longevity. It is far more difficult to address and fix a chronic dental issue once the horse has reached later age.

Weight Loss

The senior horse that is dropping pounds requires a closer look. Dental care may need to be addressed if they are not grinding their food properly. If the enamel is soft, teeth are missing or worn, changes may need to be made from coarse feeds to softer ones. Easy to digest supplements may include vegetable oil. Discuss with your veterinarian or equine nutritionist the best methods to satisfy your senior's dietary needs. Stay on the lookout for quidding (chewing then dropping balled up wads of food) as this indicates a dental problem.

One needs to rule out factors which can cause weight loss such as parasite burden, tumors and infections. Winters can begin to take a tougher toll on the senior horse. The energy required for a horse to thermoregulate in the cold is often underestimated. They may require an increase in feed and a blanket to help stay warm. Checking body condition score should be part of every senior horse's weekly routine. Old age is no excuse for an overly thin equine- body condition score should be between four and seven. Discuss with your veterinarian or equine nutritionist the best methods to satisfy your senior's dietary needs and make any dietary changes slowly.



Arthritis

- The older horse commonly has an accumulation of wear and tear plus past injuries.
- 60% of all equine lameness is due to arthritis. Common causes are:
- Physical Injury- triggers inflammation
- Every day wear and tear- Repetitive and excessive force on a joint may wear down the supporting tissues of the joints
- Weight-bearing joints- Knee, hock, fetlock, pastern and coffin joints are more prone to be arthritic since they endure the majority of the concussive forces. Maintaining correct hoof balance is important as a poorly balanced hoof can further overload joints.
- Poor conformation-may cause abnormal forces, placing additional strain on joints
- Other injury- bacterial infection (septic arthritis) and joint fractures will stimulate an inflammatory response that damages the joint surfaces

But, not all horses exhibit lameness at the onset of arthritis. Early diagnosis is the key in managing the progression of arthritis and joint disease. Owners should not delay in calling the vet if heat, swelling, pain or loss of function is detected. To learn more about what is normal and not, visit Equine Guelph's ["Journey through the Joints"](#) healthcare tool

Laminitis

Laminitis has many different causes and is not limited to the horse or pony which eats an overabundance of rich grass (often when given unrestricted access to rich Spring pastures). It can develop from: eating poisonous plants, overconsumption of grain, retaining the placenta after foaling, a disease that spikes a prolonged high temperature, the metabolic changes associated with EMS or trauma from repeated concussive forces (road founder).

Laminitis can occur in any breed, at any age however, overweight horses and those with metabolic syndromes (more frequent in older horses) do have a higher risk of laminitis. Laminitis is also a common sign of PPID in the older horse. Preventing the aforementioned causes is the best defense

Horses suffering laminitis will usually be reluctant to move and often stand with their front feet well out in front of them, rocking back on their heels seeking relief from the pain. They can appear as if they are 'walking on eggshells'. The hoof will be hot to touch. In severe cases the laminae weakens to the point where the coffin bone may rotate and/or sink.

Stall rest, cold therapy, corrective shoeing, pain management and anti-inflammatory therapy are some of the many treatments that your veterinarian may use to try and treat laminitis. The severity of the laminitis, and the length of time it persists will be factors in determining how soon, or if the horse will be able to return to its previous level of activity.

The first step in preventing recurring laminitis is to find the cause. Managing laminitis requires a plan with both veterinarian and farrier working together with regular assessments.

PPID (Pituitary pars intermedia dysfunction or Cushing's Disease)

Horses and ponies with PPID suffer an increase in cortisol levels. Excess cortisol is produced by the adrenal gland because the part of the brain that controls the adrenal gland (the pituitary gland) is not functioning properly. High cortisol levels increase blood sugar (glucose) levels and suppress the immune system. This hormonal disease often goes unnoticed as signs are slow to develop and are often mistaken as normal in the aging process. The disease typically occurs in older equids but has been diagnosed in horses and ponies as young as 10. While all ages, genders and breeds are susceptible to developing PPID, ponies and some breeds of horses (specifically Latin blooded horses such as Paso Finos, Peruvian Pasos, Spanish Mustangs, Arabs and Morgans) seem to develop PPID more frequently.



photo: Dr. Dianne McFarlane

Horse with pot-belly. Photo by Dr. Dianne McFarlane.

Horses and ponies with PPID will often develop a pot-belly appearance. You may notice other changes in body conformation. Common signs of PPID include formation of fat pads on top of the neck, tail head and above and around the eyes. Horses with PPID also tend to lose muscle.



Delayed shedding of hair coat.

Look for abnormal hair coat including patches of long hair on the legs, wavy hair on the neck, changes in coat colour or shedding patterns and unusual whisker growth. Up to 70% of horses seen for laminitis have been found to have PPID. It is often treated without identifying the underlying cause.

More early warning signs for PPID include: decreased athletic performance, change in attitude/lethargy and delayed shedding of hair coat.

In more advanced stages of PPID signs can include: lethargy, depression, generalized hypertrichosis (long shaggy hair coat), loss of seasonal coat shedding, skeletal muscle loss, rounded abdomen, abnormal sweating (increased or decreased), excessive

thirst, excessive passage of urine, chronic or recurrent infections (i.e. sole abscess, ulcers, etc.), laminitis, absent reproductive cycle/infertility and hyperglycemia (high glucose levels in the blood).

Early diagnosis is important. If you notice any of the above signs in your older horse – contact your veterinarian. After a complete examination, if your veterinarian suspects PPID, they may recommend following up with some blood tests to check for PPID. The most common tests to diagnose equine PPID include: measuring Resting (basal) ACTH and fasting insulin level.

Studies have indicated success managing the clinical signs of PPID with the drug pergolide mesylate. It acts on the pituitary to ultimately decrease circulating ACTH (adrenocorticotropin) and other hormone levels. Daily treatment is needed to improve the horse's quality of life by reducing disease signs and the risk of other illnesses. Your veterinarian will be able to advise you if pergolide mesylate is a treatment option for your horse.

As of yet there is no cure for PPID but there are ways to help control the signs and improve health of the horse by working closely with your veterinarian. Horses with PPID also require extra diligence in providing regular hoof care, dental care and body clipping. Making sure changes in diet occur slowly and effectively and treating any infections will help promote health in the horses with PPID. Dietary restrictions should be discussed with your veterinarian and may include: decreased starch/ carbohydrate feed, low protein forage – i.e. no alfalfa, limited fresh grass especially in the Spring, restricted sugar intake – i.e. molasses feeds, treats.

Early diagnosis provides the best opportunity to manage PPID and minimize the progression of symptoms that can be career and life limiting.

EMS (Equine Metabolic Syndrome)

There is a fair bit of confusion in the horse world over mixing up PPID and EMS as they share many of the same clinical signs. Horses with PPID may also have some of the features of EMS but horses with EMS only rarely have PPID.

Equine Metabolic Syndrome had many previous names: peripheral Cushing's Syndrome, pseudo-Cushing's syndrome, hypothyroidism, and insulin resistance syndrome.

Both PPID and EMS require working with your veterinarian planning regular check-ups for blood work, dental care, regular hoof care and special attention to dietary needs. Performing diagnostics is necessary to conclude which disorder you are dealing with and determine the best treatment options.

Horses with EMS do not display hypertrichosis (excessive hair growth) or delayed shedding. EMS tends to be seen in horses over 5 years of age where PPID cases are more common in horses over 15. It is possible for horses with EMS to develop PPID. Working with a veterinarian for accurate diagnosis is critical in determining future management. Laminitis and obesity are often the first clues in identifying both disorders.

To learn more about horse health and disease, enroll in [Equine Guelph's online courses](#), including The Senior Horse!