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Treating the osteoarthritic horse has become much more common practice as an older horse population continues to be used in competitive equestrian events. A decade ago or so, a horse that was 15 years of age was considered geriatric for performance expectations and many were retired. In today’s sport horse and companion horse environment, many horses are performing into their 20s. Many factors contribute to this including the termination of equine slaughter in the United States, the universal use of parasiticide and vaccinations programs, and the overall incorporation of more and more horses into a companion-like environment. Horse racing has less influence in the overall horse population as gambling casinos move away from the racetrack and even race horses are performing in older divisions. Second careers are now common for horses as they are put to good use as children’s competitive horses, 4-H horses, trail horses and training horses in riding stables. These older horses offer calmer personalities and experience in the show ring that is irreplaceable as pleasure mounts and horses that safely serve our younger riders.

With age comes degenerative joint disease from wear and tear of normal use and particularly competitive use of these horses. The distal joints in particular are under a long moment arm and are torqued and loaded at very high levels particularly in jumping, reining, racing, and competitive harness sports. Almost all older horses will be stiff or lame from general or specific osteoarthritis (OA). Newer biologic and holistic treatments of for a intermediary therapy to steroids or more drastic neurectomy and find a place in the support of overall joint health.

The most common joints affected with arthritis and causing lameness in the older horses is: the coffin joint, pastern joint, fetlock joint on the front limb and the fetlocks and lower hock joints in the hindlimbs.

Systematic and careful inspection of the lower limbs of these horses on a regular basis will identify early flares of joint soreness or heat that can be immediately addressed. The serial use of OA treatments will be discussed and demonstrated by the following cases. First is a 16 year old Oldenburg /TB horse that has shown extensively on the hunter circuit. Starting at 6 years old he performed for 7 years at A show level in the Amateur Owner (3’6” division) and Amateur Adult division (3’3”). Subsequently intermittent RF lameness and bilateral front limb stiffness along with his great personality dropped his competitive division to Childrens Hunter (3’). Conformationally, this horse is quite correct, but has a slight valgus of the pastern distal to the fetlock on the right front. The consequence of this is that when his hoof is perfectly balanced, he tends to roll to the outside of the hoof at the coffin joint. This becomes most notable when he is hoof is long. Long term management of the hoof includes frequent trimming every 5 weeks and keeping a slightly longer outside wall (2-3mm). Regardless intermittent heat and very mild swelling can be detected at the lateral collateral ligament of coffin joint and at other times effusion within the coffin joint and at other times some hardness to the joint capsule insertion on the palmar medial and dorso-
lateral aspect of the pastern joint. Each of these presentations if immediately addressed by short rest, icing and massage, and injections can arrest the process and result in a serviceable soundness. For the coffin joint effusion, the joint is drained and injected with HA and not more than 3 times per year treated with 40 mg or less of Methylprednisolone acetate (MPA). If the pastern joint capsule is irritated it is one of the earliest signs of high ringbone, but immediate treatment can ward off radiographic changes and arthritic changes for years. I personally inject the capsule directly and not the joint if at all possible to quiet down the capsulitis. Very low doses of diluted MPA or triamcinolone are preferred with 0.3cc per site directly over the inflamed portion of the capsule. For horses with this capsulitis or with other signs of heat around the collateral ligament of the coffin joint, direct injection of the palmar digital nerve with a cocktail of sarapin and 8mg MPA will arrest the wind up of the nerves associated with the local inflammation. Just this treatment followed by low dose phenylbutazone and rest for a few days will often return a horse the work. Systemic HA and PSGAG would compliment any local treatment that was suspected of being OA. These systemic medications seem to work better in younger horses and seem to be less effective in the geriatric horse in my experience. In horses with continued pastern heat and lameness, it may become necessary to inject the joint directly with a steroid. This is avoided to all lengths, but it is better to inject than leave the joint inflamed. Persistent joint capsule inflammation will result in osteophytes and joint stiffness and ultimately chronic OA. Judicious use of steroids are a mainstay of effective joint management if they are not abused, overused and if complete diagnostic blocking is performed regularly to map and monitor the exact sources of lameness. For the horse above, when he has slight swelling over the collateral ligment, the shoes are changed and he is trimmed. Local injection of PRP or other platelet product can be tried before steroid use. Immediate and persistent use of the GameReady rehabilitation system can help reduce swelling and heat. Use of anti-inflammatory injection over the nerves and shock wave of the nerves can be most helpful and avoids the direct injection of the collateral ligament area.

Use of low dose phenylbutazone and/or firocoxib before, during (on permissible levels) and after shows can help prevent the onset of joint flares. Keeping the joints quiet is key to preventing the sequential deterioration of the joint to OA. Of course if chip fractures occur, immediate treatment is indicated, such as arthroscopic removal. For the high motion joints such as the fetlock, carpus, and stifle joints, the serial use of intra-articular serum products, such as autologous conditioned serum can be effective in some horses that have mild cartilage injury with no or minimal evidence of OA on radiograph. In these older horses, the fetlock joints are often stiff with marked reduction in joint motion, but may not be the source of lameness.

For upper limb problems in sport horses, particularly jumpers, the injection of the SI joint, hip joint and back facets can be performed with sarapin and low dose steroid as well as PRP effectively.

Use of stem cell intra-articularly in horses is being performed for horses with OA, but no current studies are published on efficacy. Current cell techniques will be discussed.