Delay OCD Surgery for Optimal Racehorse Performance

While equine surgeons enjoy sharing the mantra "if in doubt, cut it out," researchers recently reported that when it comes to some osteochondritis dissecans (OCD) lesions, letting nature run its course might be the better option.

Such lesions occur because of a loss of blood supply to the developing bone/cartilage junction in the joint. "This leads to, effectively, a fracture of the cartilage, which forms a loose flap over the bone cartilage," says Tom Russell, BVMS, Dipl. ECVS, from the Bendigo Equine Hospital, in Victoria, Australia. "In some cases the flap can fall off and become loose in the joint, causing swelling in the joint and lameness. Such cases are generally surgical candidates."

In recent years, however, owing to the increased practice of taking X rays prior to Thoroughbred yearling sales, veterinarians commonly diagnose OCD in weanlings in the absence of clinical signs. This means that owners of weanling and yearling Thoroughbreds with OCD have the option of pursuing surgery before signs of disease occur, which is referred to as "preemptive" surgery. But should they?

"OCD lesions in the stifle occur at a site that articulates with the patella (kneecap), and removal of cartilage is not an innocuous procedure in this joint," Russell explained. "There is evidence that OCD lesions in the stifle joint can reattach for up to 12 months after birth. Therefore, surgery may not be necessarily in many juvenile Thoroughbreds."

To determine the impact that stifle OCD surgery has on future racing performance in juvenile Thoroughbreds, the study authors followed 37 juvenile Thoroughbreds with stifle OCD who underwent surgery, 35 juveniles with hock OCD, and a cohort of age- and sex-matched controls with no evidence of OCD. "We found that juveniles with stifle OCD that underwent surgery had significantly lower total earnings, fewer total starts, and fewer first place finishes compared to the controls," Russell summarized.

Russell and colleagues concluded that juvenile Thoroughbreds undergoing surgery for OCD lesions of the stifle had significantly decreased performance as racehorses. They therefore recommend that delaying surgery might benefit some of these animals.

"Nonsurgical management, in cases where the fragment is still attached, is successful in 50% of juvenile human cases," added Russell. "Our experience is that this is also true in horses. Even in cases where surgery is necessary, simple confinement can often lead to a significant reduction in the size of the lesion that needs to be removed. We currently operate on cases that might well do better without surgery because the timeframe of presentation to sales does not allow us to wait."

"The industry currently has a preference for buying yearlings that have already had surgery performed," he continued. "That situation is unlikely to change any time soon. However, whilst this is a small study and would benefit from the corroboration of others, it seems that purchasers may be better served buying yearlings with (nonsymptomatic) lesions and delaying surgery. In many cases it may even turn out to be unnecessary. I certainly would delay surgery in animals not intended for sale as yearlings."

The study, "Treatment of osteochondrosis dissecans in the stifle and tarsus of juvenile thoroughbred horses," was published in *Veterinary Surgery*. 