Racehorse Training Injuries Vary by Stable in New Study

by: Christa Lesté-Lasserre
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Which kind of injury is most common to a racehorse? That all depends on who trains it and at which track, according to a group of British researchers. Their recent survey of three major Thoroughbred stables in the United Kingdom showed that the patterns of training-related injuries vary significantly between training centers and trainers.

The study, which analyzed 248 injuries in 217 horses in the Newmarket region from 2005 to 2007, also revealed general regional patterns as well as seasonal trends in injury types that coincided with peak racing periods.

Overall, the most common race-training injuries in Newmarket were hind limb stress fractures, specifically of the tibia, said Pete Ramzan, BVSc(Sydney), MRCVS, partner at Rossdale & Partners' veterinary practice in Newmarket, and primary author of the research. Regular training on uphill tracks is the probable explanation for this pattern, he said.

However, this kind of injury happened only half as often in one yard as it did in each of the other two, Ramzan reported. Furthermore, long pastern bone (P1) fractures were three times more common in one of the yards—but this yard also had the lowest incidence of superficial digital flexor tendonitis (SDFT) and pelvic stress fracture. In two yards, P1 fractures occurred more frequently in the front legs, whereas in the third yard, they happened most often in the hind legs.

Although patterns differed among trainers, overall injury rates were similar. During the peak training season (March to September), there were marked increases in injuries, particularly in P1 and tibial fractures. Even so, up to 40% of tibial and pelvic stress fractures occurred in horses which had not yet even begun gallop training. "Vets and trainers shouldn't be surprised when tibial or pelvic stress fractures crop up in horses that have done nothing more than canter," Ramzan said.

Surprisingly, certain injuries in Newmarket occurred mostly on the right side, he said. This was true for 82% of carpal fractures, 69% of SDFT strains, and 69% of P1 fractures. "These results were unexpected given that most training in Newmarket occurs on straight or gently-curved tracks," he said. Further biomechanical research would be needed to explain this phenomenon, he added.

By focusing on all injuries on and off the racetrack, Ramzan's study provides a good benchmark for trainers to assess their injury levels over a season, he said. "Vets shouldn't expect injury patterns to be the same in Newmarket as they are in Hong Kong or Melbourne or any other center," he said, "and although this would seem common sense there has been little evidence out there to support it."


*Readers are cautioned to seek the advice of a qualified veterinarian before proceeding with any diagnosis, treatment, or therapy.*

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