

Study: Most Lesions in Sale Yearlings Have No Impact on Performance

Researchers at the University of Melbourne in Australia have found that the majority of radiographic lesions found in sale yearlings have no effect on their racetrack performance when they are 2 and 3 years old. The study was presented during the International Breeders' meeting in Australia.

"It just confirms our suspicions that X-ray findings can get in the way way of purchasing a proper athlete at the yearling sales," said John Messara, the owner of Arrowfield Stud and the chairman of Aushorse, which promotes Australian horses around the world.

Dr. Chris Witton supervised the study, which was conducted by PhD candidate Melissa Jackson and funded by the Rural Industries Resource and Development Corp. The researchers looked at 81,000 radiographs taken of 2,401 yearlings at auctions conducted by Magic Millions and William Inglis & Son in 2003, the year sale repositories were introduced in Australia.

According to the researchers, only a few types of lesions had "a notable effect on performance." They said horses with more severe sagittal ridge OCDs (osteocondritis dissecans lesions) in their hind fetlocks were "10 times less likely to start as 2-year-olds or 3-year-olds" and "tended to make their debuts later and have slightly fewer starts." However, researchers found no significant difference in the number of wins and prize money earned by these horses.

"Horses with OCD lesions in their hind fetlocks may be slower to mature," Witton said. "There are many other possible explanations."

Horses with any OCD lesion of the stifle "performed at a slightly lower rate," the researchers reported, and so did horses with a bone formation on their front sesamoids. However, the effect was small enough that "it's hard to get excited about them (the abnormalities)," Witton said.

There were eight types of lesions that had no effect on performance, including "bony fragments

in the fetlock and sesamoid fractures," Witton reported.

Witton also observed that because it was the first year for repositories at Australian yearlings sales, "it is likely that horses with more severe radiographic lesions were not entered because their owners knew they would be radiographed."

In addition, Whitton said: "Many of the horses that were radiographed had been operated on and the fact that they performed well could indicate that surgery was actually highly

beneficial. There is some evidence that is the case for stifle OCDs because the milder lesions (mostly not operated on) did affect performance slightly whereas the horses with more several lesions (usually operated on) performed well."

Dr. Wayne McIlwraith of the University of Colorado said it is difficult to evaluate the validity of the research until it has been peer-reviewed and published in a scientific journal. "We need to be able to see all the data," he said.

McIlwraith said it also is important to know exactly which horses in the study had surgery on their lesions in order to evaluate the abnormalities' effects.

By Ric Chapman



The arrows show OCD lesions in a radiograph of a stifle joint.

DR. MARK MARTINELLI