Ability to Race of 518 Thoroughbred Weanlings and Yearlings After Arthroscopic Debridement of Femoropatellar Osteochondritis Dissecans

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Thoroughbreds <2 yr old have a favorable prognosis after arthroscopic debridement of radiographic femoropatellar osteochondritis dissecans lesions. Authors’ address: Rood and Riddle Equine Hospital, PO Box 12070, Lexington, Kentucky 40580; e-mail: dspike@roodandriddle.com (Spike-Pierce). © 2009 AAEP.

1. Introduction
Our goal was to determine the ability of immature Thoroughbreds with femoropatellar osteochondritis dissecans (OCD) to race after arthroscopic debridement independent of lameness presentation.

2. Materials and Methods
A total of 518 Thoroughbreds <2 yr of age presented to Rood and Riddle Equine Hospital (1992–2004) for arthroscopic debridement of femoropatellar OCD lesions.

Pre-operative radiographs were used to determine the length of the lateral and medial trochlear ridge and patellar lesions. The values were also added for a cumulative length. Total length categories were as follows: grade 0, no radiographic lesion; grade 1, =20 mm; grade 2, >20 to ≤40 mm; grade 3, >40 to ≤60 mm; grade 4, >60 mm.

Data analysis was done in JMP. Proportions were compared using $\chi^2$ tests, and means were compared using one-way analysis of variance.

3. Results
Arthroscopic surgery was performed on 760 stifles of 518 horses consisting of the following: grade 0, n = 5 (<1%); grade 1, n = 62 (12%); grade 2, n = 205 (40%); grade 3, n = 139 (27%); grade 4, n = 107 (21%). Incidence of starters was as follows: 0 mm, n = 1/5 (20%); ≤20 mm, n = 47/62 (76%); >20 to ≤40 mm, n = 168/205 (82%); >40 to ≤60 mm, n = 98/139 (71%); >60 mm, n = 66/107 (62%). Horses with grade 2–4 lesions showed a decreasing ability to race, with 82%, 71%, and 62%, respectively, starting a race (p = 0.0004).

4. Discussion
Sixty-nine percent of all Thoroughbreds started a race from 1989 to 2001. Compared with this breed average, grade 1–3 lesions do not have a different ability to race.

Footnote
JMP, SAD, Inc., Cary, NC 27513.