Cathedral Reader

Stewards' summary:

Cathedral Reader was pulled up as she was coming out of the turn near the ¼ pole and it was obvious that she was seriously injured. It was determined that the injury was not the result of interference and that no other horse had been involved.

Brian Hernandez, Jr. said he was familiar with the filly as he had ridden her several times prior to this race and had no concerns about her during the post parade. He indicated that she had just "picked up the bit" when the incident occurred.

Dallas Stewart had no concern about the condition of the filly prior to the race and readily agreed to provide veterinary records as requested.

Veterinary summary:

- This 4-year-old filly, trained by Dallas Stewart and owned by G M B Racing, sustained an injury to her right forelimb at Keeneland on April 6, 2019 in the 8th race, a Grade I stake run at 7 furlongs over a fast dirt surface.
- KHRC veterinarians administered a sedative/analgesic and applied lateral support for transport.
 Blood was collected by KHRC veterinarians for submission to Industrial Laboratories for analysis.
- The filly was euthanized due to the severity of her injuries.
- The body was transported to the University of Kentucky Veterinary Diagnostic Laboratory and submitted for necropsy.

Findings:

Review of pre-race exam findings and exam history

A review of pre-race exam findings for the Case horse and unaffected cohorts (Controls) from the same race was performed. There were no other contemporary exams for the Case horse, so it was not possible to determine if her condition had changed since her last start or over a longer period of time. In her previous start in another racing jurisdiction, no exam findings were recorded in the InCompass pre-race exam module. The last exam recorded (in 2018) noted subtle bilaterally symmetrical changes that are commonly found in race horses of this age, and are consistent with a determination of racing soundness. The exam on 4/6 noted asymmetry with respect to range of motion in the front fetlocks. However, there was no evidence of inflammation, resistance to flexion or palpation, nor evidence of gait abnormality when jogged in-hand or observed in the post parade. The nature of exam findings recorded for the Case horse were consistent with those recorded for Controls. There were no exam findings for Cathedral Reader that distinguished her clinical presentation from the other horses in her race.

Review of treatment records

Treatment records were provided that encompassed the filly's health care for the preceding 60 days. She was administered furosemide, and no other medication on breeze days. She was dispensed a one week prescription of Clenbuterol syrup on February 20 and again on February 26. The two-week treatment regimen was consistent with the manufacturer's recommendation and the

treatments ended over a month prior to her next start. She received weekly injections of chondroprotective medications (Legend and Adequan). The filly was prescribed Gastrogard (omeprazole) which is used for the treatment and prevention of gastric ulcers. The absence of NSAID administrations on breeze days allowed the trainer and veterinarians to accurately assess the filly's response to high-speed exercise. Overall, her medication history was conservative and suggestive of a horse that was demonstrating good musculoskeletal health.

- Analysis of risk factors and other criteria (Case horse compared to uninjured cohorts in the same race)
 - Age at first start

Case horse: 1108 days.

Controls range: 801-1542 days.

Controls Mean: 957 days Controls Median: 879 days

Age at first breeze Case horse: 790 days

Controls range: 754-912 days. Controls Mean: 801 days Controls Median: 785

o Age on 4/6/19

Case horse: 1431 days

Controls Mean: 1443 days Controls Median: 1448 days

Comments: The conditions of the race were written for 4 year olds and upward. However, all of the horses in the race were 4 year-olds. The age range reflects that commonality, and there is no distinction with respect to the case horse.

Owner / breeder?

Case horse: No

Control horses: No: 6/8 Yes: 2/8

Comments: The ownership for the majority of horses in this race (Case horse included) was not the breeder of the horse--who would have multiple interests in the success of a horse he bred. This was a Grade 1 stakes race, and successful performance would enhance the credentials of a filly entering the breeding shed. At this level of competition, a filly's long-term health is linked to her maximum value. Risk aversion to injury and/or poor performance would be high.

o Horse acquired through claim?

Case horse: No

Control horses: No: 8/8

Comments: It would be most unlikely to acquire a horse of this caliber

through the Claim Box.

Days in training (1st published work to race date)

Case horse: 641 days.

Controls Mean: 643 days
Controls Median: 660 days

Cumulative high-speed furlongs (racing and training)

Case horse: 154 f

Controls range: 82-273 f Controls Mean: 158 f Controls Median: 157 f

High-speed furlongs per day in training (Day 1=date of first published work)

Case horse: 0.24 f / day

Controls range: 0.13 – 0.38 f /day

Controls Mean: 0.25 f / d Controls Median: 0.24 f / d

o Interval from previous start

Case horse: 70 days

Controls range: 20-50 days Controls mean: 32 days Controls median: 31 days

Comments: The Case horse's interval from her previous start is substantially longer than any of the Controls'. That, combined with a layoff of 60+ days initiated enhanced scrutiny for the Case horse. The results of her prerace exam and assessments on-track during the post-parade did not warrant intervention.

o First time starter?

Case horse: No Controls: No: 8/8

Comments: One would not expect a horse to make its first start in a

Grade 1 stake.

Apprentice jockey?

Case horse: No Controls: No: 8/8

Comments: Jockey experience is associated with improved decision making related to the detection of gait abnormalities prior to a race or a reaction to an abrupt change in gait.

o Drop in class from previous start?

Case horse: No Controls: No: 8/8

Double drop in class from previous start?

Case horse: No Controls: No: 8/8

Comments: By definition, entry in a Grade 1 stake cannot be a double-

drop in class. There is no class of race above Grade 1.

o Raise in class from previous start?

Case horse: Yes Controls: Yes: 8/8

Comments: The raise in class suggests that the Case horse's connections

had confidence in her health and athletic ability.

o Number of times claimed in the preceding 6 months

Case horse: 0 Controls: 0: 8/8

Comments: As expected, horses competing at this level are unlikely to

be entered in claiming races.

o Number of starts in preceding 30 days

Case horse: 0

Controls: 0: 5/8 1: 3/8

Number of starts in preceding 60 days

Case horse: 0

Controls: 1: 6/8 2: 2/8

Comments: In general, the interval between races for stakes horses is longer than for horses in allowance and claiming races and in and of itself is not of concern. The fact that the Case horse had not made a race start in > 60 days resulted in additional scrutiny at the pre-race exam and on track. Again, the results of her pre-race exam and assessments on-track during the post-parade did not warrant intervention.

Cumulative high-speed furlongs preceding 30 days

Case horse: 12 f

Controls range: 7-16.5 f Controls mean: 11 f Controls medial: 10 f

Cumulative high-speed furlongs preceding 60 days

Case horse: 28 f

Controls range: 13-31 f Controls mean: 22 f Controls median: 23 f

Number of layoffs 30 ≥ days in preceding 6 months

Case horse: 4

Control horses: 2: 2/8 3: 2/8 4: 4/8

Comments: While multiple 30+ day layoffs could warrant elevated concern in a claiming horse, stakes horses schedules are more likely to have longer intervals between races simply by virtue of the stakes calendar.

o First start off ≥ 60 day layoff?

Case horse: Yes

Control horses: No: 8/8

Comments: There is increased fracture risk in horses returning to high speed exercise following a layoff—particularly so in the first two starts. There is nothing in the Case horse's medical record to indicate the layoff was to address injury or unsoundness. During the layoff period she

recorded regular works at approximately 1 week intervals. Remaining in a regular high-speed exercise program mitigates much of the risk associated with return to racing following a layoff.

o Second start off ≥ 60 day layoff?

Case horse: No.

Control horses: No: 8/8.

Comments: None.

o Length of ≥ 60 day layoff ending in preceding 6 months

Case horse: 70 days

Controls range (n=3): 60-337 days

Comments: For the Case horse, the layoff immediately preceded her race on April 6. Each of the 3 Control horses had a minimum 2 starts after their layoffs.

after their layous.

History of being Vet Listed?

Case horse: No

Control horses: 0: 5/8 1: 3/8

Comments: Horses that have been Vet Listed are at increased risk of fatal fracture for several months following their release from the Vets List. After that time, their risk decreases but never returns to baseline.

- Review of necropsy report and drug testing results
 - o Drug testing: No prohibited substances detected. No therapeutic medications detected above regulatory threshold concentrations.

Note: Only blood was submitted for analysis. Urine collection typically does not occur for horses euthanized. The diagnostic laboratory is instructed to collect urine if it is present in the horse's bladder, but it rarely is. So while a blood-only sample is subjected to the broadest scope of analysis possible, that scope is reduced compared to what can be applied to a paired (blood and urine) sample.

Necropsy report:

Musculoskeletal system:

Right forelimb: Compound lateral condylar fracture and axial fracture off the lateral sesamoid. The fetlock joint is luxated. The superficial and deep digital flexor tendons, intersesamoidian, straight sesamoidian, and annular ligaments are torn. The medial aspect of the suspensory ligament is ruptured.

Left forelimb: Articular cartilage scoring (2/5); arthrosis of P1 (2/5). The following were scored 1/5: MCIII cartilage-- loss and medial parasagittal groove scoring, condylar flattening, and palmar pouch hyperplasia; sesamoids—cartilage loss. The examination of the opposite, unfractured limb can provide insight into a horse's bone health prior to a fracture's occurrence because these changes are typically bilateral.

Lungs: moderate, diffuse, acute pulmonary hemorrhage

Stomach: Moderate, multifocal, subacute gastric ulceration

No significant lesions: Brain, heart, liver, kidney, small and large

intestine.