

OVC/VTH Case Number: **568473**
LYNN LANDRIAULT
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E34 HANOVERIAN BLACK
MC 03-MAY-2003 **PETER**
SURPRENANT, DR. MARIE J., 705-855-8604
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AGENT: MICHAEL, 705-690-6557

DISCHARGE STATEMENT

FINAL

Clinicians: TROUT/BOURZAC/GOMEZ

Admitted on: February 16, 2011 **Released on:** February 19, 2011

Authorized by: _____ **Date:** _____

Received by: _____ **Date:** _____

February 24, 2011

IN CLINIC SUMMARY

Diagnosis: Chronic RF lameness.
Bilateral front navicular syndrome, more severe in the right foot.

Tests: Detailed lameness examination.
MRI exam: Bilateral front feet.
Radiographic exam: Bilateral front navicular series.

Treatments: None at OVC.
Discussed with Ms. Landriault & Dr. Surprenant - Exercise, corrective trimming/shoeing, & medications used for navicular syndrome.

INSTRUCTIONS TO OWNERS

Exercise: Discussed with Ms. Landriault & Dr. Surprenant - Given your housing/pasture situation for the next 2 months, stall rest with hand-walking or walking under saddle on flat ground (soft enough to allow the feet to roll into the surface) once or twice per day for 15 minutes.

Diet: Normal, as per level of exercise.

Medication: Discussed with Ms. Landriault & Dr. Surprenant:
1. If needed, as when Peety's lameness increased after he went home - Phenylbutazone: 2 grams orally twice per day for 2-3 days. Then, 1 gram orally twice per day for 2-3 days.

Whose copy is this? Medical Records' [] Owner's []
Has a copy been sent to the referring veterinarian by facsimile? Yes [] No []

2. Additional medication to consider after evaluating the effects of corrective trimming/shoeing:

- a. Isoxsuprine or pentoxifylline, which may positively alter circulation to the navicular region.
- b. Tiludronate (Tildren), which may inhibit further bone resorption in the navicular bone.

Follow Up:

Discussed with Ms. Landriault & Dr. Surprenant - Corrective trimming/shoeing of both front feet should be performed, with the goals of: a) improving break-over of the foot to decrease stress/tension on the navicular region (i.e. navicular bone & associated tendons & ligaments), b) supporting the heel region of the foot to decrease stress/tension on the navicular region, & c) decreasing direct concussive forces on the navicular region. These corrective trimming/shoeing methods may include:

1. Keeping the toe trimmed relatively short.
2. Using a shoe with a rolled &/or squared toe.
3. Using a bar or egg-bar shoe.
4. Using a shoe with a full wedged pad.

CASE SUMMARY

"Peety" was referred to the Ontario Veterinary College (OVC) Large-Animal Clinic on February 16, 2011 for an MRI examination of the front feet & clinical evaluation of a chronic right-front lameness of 4 months duration. There had not been any lameness problems from the time that the horse was purchased in July 2008 until July 2010. In July & August 2010, a left-front lameness was present for about 5 weeks. The current right-front lameness had been present since October 2010, & had repeatedly markedly increased & markedly decreased since its onset. When most severe, the right-front lameness was characterized by an obvious lameness at a walk, increased heat in the foot, a strong digital pulse, & mild swelling in the lower limb, most prominent on the back (palmar) side of the pastern & fetlock. When least severe, the right-front lameness was not visible or barely visible when Peety was exercised at a walk & trot under saddle, with none of the aforementioned abnormalities identified in the right-front limb. Given the clinical signs, previous treatments (e.g. foot soaking, poultices) by Drs. Surprenant & Travers had been aimed at a suspect foot abscess or severe sole bruise. X-ray examinations of the front feet by Drs. Surprenant & Travers had not identified any significant abnormalities, although these examinations did not specifically evaluate the navicular region. During one of the clinical lameness examinations (Dr. Travers), the right-front lameness improved significantly (approximately 70%) after a palmar-digital nerve block was performed, which desensitizes the sole & palmar 1/3 of the foot.

On physical examination at OVC, Peety was in good general condition & all vital parameters were within normal limits. A 4-cm-long scar on the upper outside (proximolateral) aspect of the right-hind cannon bone (MT3) was healing normally. A mild right-front (grade 3/5) lameness was present when Peety was trotted in a straight line on a firm surface, which increased when he was lunged at a trot to the right (clockwise). Palpation of the limbs & manipulation of the joints was unremarkable. There was no sensitivity to hoof testers in either front limb. Stress (flexion or extension) tests were performed on the joints in all 4 limbs. Sustained flexion of the right-front lower limb (i.e. fetlock, pastern & coffin joints) consistently increased the right-front lameness. All other flexion/extension tests were unremarkable. Similar to Dr. Travers above, a palmar-digital nerve block was performed. However, to help further localize the source of the lameness, this block was

Admitted On: February 16, 2011

first performed only on the lateral side, & then the medial side was subsequently added. Each of these blocks, lateral & medial, improved the lameness a similar amount; & together they markedly improved the lameness by about 70%. Together, they also eliminated the positive response to sustained flexion of the right-front lower limb. Similar to Dr. Travers exam, these results indicated that the major source of the right-front lameness was probably in the back (palmar) 1/3 of the foot. After an abaxial-sesamoid nerve block was also performed, which desensitizes the entire foot & majority of the pastern, the lameness improved an additional 10-20% (i.e. total of 80-90%).

On February 17, Peety was placed under general anesthesia & an MRI examination of both front feet & pasterns was performed. In the right-front foot, there were 3 abnormal findings: 1) The channels (synovial fossa) within the navicular bone were obviously enlarged. 2) There was remodeling in the impar ligament of the navicular bone & in the adjacent deep digital-flexor tendon close to the attachment (insertion) of each of these structures on the coffin bone (P3). These changes were consistent with adhesions (scar tissue) between the impar ligament & deep digital flexor tendon approximately 1 cm below (distal to) the navicular bone. 3) There were mild irregularities in the lining of the navicular bursa just above (proximal to) the navicular bone, with several small localized areas of irregularity (fibrillation) on the adjacent front (dorsal) surface of the deep-digital flexor tendon. In the left-front foot, there was 1 abnormal finding: A large localized area of altered density was present in the outside (lateral) aspect of the navicular bone.

A subsequent x-ray examination (navicular series) of both front feet was performed. There was a moderate increase in the size & number of channels (synovial fossae) in the lower (distal) border of the navicular bone in both front feet, but more severe in the right-front foot. In the left-front foot, there was a suspect area of increased density (sclerosis) in the lateral aspect of the navicular-bone medullary cavity, best seen on the skyline/caudal-tangential view. This x-ray study was also compared to several x-rays of the front feet that were performed during the prepurchase examination in 2008. There appears to have been a significant increase in the size & number of synovial fossae within the navicular bone in each foot.

As we discussed, findings from the clinical-lameness, MRI & x-ray examinations were consistent with navicular syndrome in both front feet, more severe in the right foot. X-ray changes appeared to have progressed significantly over the past 30 months, since the prepurchase exam. The previous sudden marked increases in lameness, usually when Peety has been returned to exercise, may have corresponded to tearing of adhesions (scar tissue) in the navicular region. Subsequent inflammation of the digital flexor-tendon sheath may have been the source of the previously noted swelling on the back (palmar) side of the pastern. Given the above findings & the duration & periodic severity of Peety's lameness, prognosis for future soundness is guarded, at best.

As we discussed, the corrective trimming/shoeing which is summarized above is the basis for any treatment plan. Depending on the response to trimming/shoeing, medications such as isoxsuprine, pentoxifylline & tiludronate, may be beneficial & should be discussed further with Dr. Surprenant.

Thank you for referring Peety to the OVC Large-Animal Clinic. He is a very

nice horse to work with. If you have any questions or concerns please contact Drs. Trout, Bourzac or Gomez at 519-823-8840.