Equine Lameness Emergency



Equine Lameness Emergency: Part 1

- Overview of lameness in the horse
- How to perform a lameness examination
- The types of lameness seen in general practice in an emergency situation
- Two case presentations: Emergency Lameness



Lameness

- A basic definition
- Lameness, the movement with a limp, is a symptom or clinical sign. Equine lameness has been defined as "an alteration in the animal's normal stance and/or mode of progression caused by pain or mechanical dysfunction" (Wyn-Jones, 1988



- One of the most common (if not the #1) body systems evaluated and treated is the <u>musculoskeletal system</u>
- Detecting the source of lameness can be daunting – many probs. have no obvious external signs
- Common Clinical Signs include
 - swelling, heat
 - Discharge
 - muscle atrophy
 - lameness (#1)



 3 reasons for lameness include:

 Pain (#1)
 Mechanical interference w/out pain (scar tissue)
 Neurological

3 goals of a lameness exam Identify the location Diagnose Treatment plan

Treatment plan



- 1st step is to obtain a complete history
 - Signalment
 - Length of issue
 - Previous health issues
 - Speed of onset
 - Exercise induced
 - Known trauma
 - Any treatment started
 - Pattern to the lameness



Palpation – feeling for any heat, swelling, or pain The wear pattern of the hoof or shoe is evaluated Hoof test for pain Nerve blocks may be used to localize the area of pain

Next the horse is observed at rest & in motion

Rest

 Observe from a distance for any obvious abnormalities, confirmation, how horse stands (holds legs)

Motion

 Observe horse walking to & from the clinician, may need multiple surface types, may need to remove shoes, observe head & neck carriage

Motion (cont.) 1. Walk In a straight line Up & down an incline Backing up 2. Trot – usually the most informative gait In a straight line In a circle (both directions) Flexion tests

Grading of Lameness

- Grade-1:Lameness is difficult to observe and is not consistently apparent, regardless of circumstances (e.g. under saddle, circling, inclines, hard surface, etc.).
- Grade-2: Lameness is not consistently observed at a walk or when trotting in a straight line but consistently apparent under certain circumstances (e.g. weight-carrying, circling, inclines, hard surface, etc.).
- Grade-3: Lameness is consistently observable at a trot under all circumstances.
- Grade-4: Lameness is obvious at a walk.
- Grade-5: Lameness produces minimal weight bearing in motion and/or at rest or a complete inability to move.

- Misc. tests include
 - X-rays
 - Ultrasound
 - Thermography
 - Nuclear scintigraphy
 - MRI
 - CT
 - Arthrocentesis
 - Rectal exam
 - Biopsy
 - Force plate gait analysis
 - High speed cinematographic gait analysis



Dewey

History/Exam

- Acute onset lameness RF
- Almost non weight bearinglameness grade 4- 5
- Moderate increase digital pulse
- No heat swelling anywhere else
- Sensitive to hoof testers



Hoof Testers





Non-weight bearing not a lot of swelling

- Hoof abscess
 - Is the hoof hot? Increased Digital pulse?
 - Usually no fever
 - Usually just one foot is affected
- Infected joints or tendon sheaths
 - History of wound or trauma?
 - May be febrile
 - Local heat and swelling over one area (joint)
- Fracture



What Now?

- What is on your differential diagnosis for Dewey?
- What is your diagnosis?
- What is your treatment plan?

What are your next steps?

Foot Abscess





Hoof Abscesses

By Michelle Anderson, The Horse Digital Managing Editor Reviewed by Vernon Dryden, DVM, CJF, Bur Oak Veterinary and Podiatry Services Photos by iStock

A hoof abscess is a localized infection of a horse's foot, usually behind the hoof wall or sole. While hoof abscesses can be extremely painful, they usually resolve easily with treatment within days.

Clinical signs of a hoof abscess include:

Lameness, often severe and nonweight-bearing;

Rapidly changing wetdry climates or wet-frozen environments. These conditions can degrade hoof quality and lead to bruising and

3-5



Hoof abscesses require wrapping to keep the area clean and prevent further infection.

Two weeks later Dewey is still lame

What are your thoughts?

What other diagnostic tests would you like to perform?

Radiographs





Lameness differentials ?

- Laminitis
 - Sore and reluctant to move on all feet (front feet)
 - Rock back
 - Increased laying down
- Non-weight bearing in one leg
 - Abscess in the foot
 - Infection
 - Fracture







REBA

History/Exam

- Mare was fine in the morning
- Came in from pasture toe touching lame: grade 5 RH
- No significant increase pulse
- Not sensitive to hoof testers
- No obvious wound'
- Very Slight swelling proximal metatarsus
- Thoughts/diagnostic tests?



Diagnostics



- Abaxial Nerve block-no improvement
- Clip where swelling –scrape
- What other diagnostic tests?

Diagnostic Tests

- More diagnostic nerve blocks
- Ultrasound
- Radiographs







Fracture Of Fourth Metatarsal Bone





Treatment

Stall Rest

Standing
Bandages

Radiograph in 4-6 weeks



In Conclusion Remember

Non-weight bearing horse: one leg

<u>Think</u>

- Infection: foot abscess
- fracture

Questions

