

# Foot pain in the horse



Roland Perrin  
DMV, Dipl. ECVS  
[www.cliniquedesbrosse.fr](http://www.cliniquedesbrosse.fr)



Clinique Equine  
DESBROSSE

2020

A lame horse



2020

**Distal block**



2020

## Foot pain

- ◆ A lame horse
- ◆ Distal palmar digital block working

◆ And ?

## Foot pain

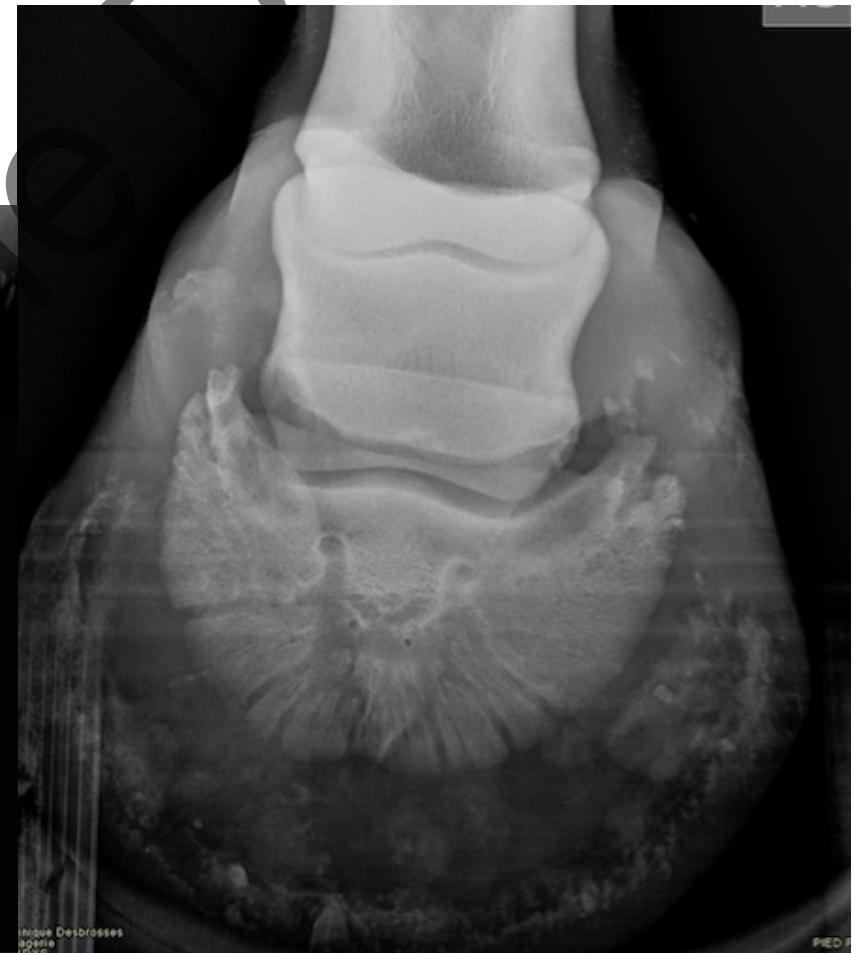
- ◆ A lame horse
- ◆ Distal palmar digital block working

◆ And ?

- ◆ What is the next step ?
- ◆ Diagnosis ?

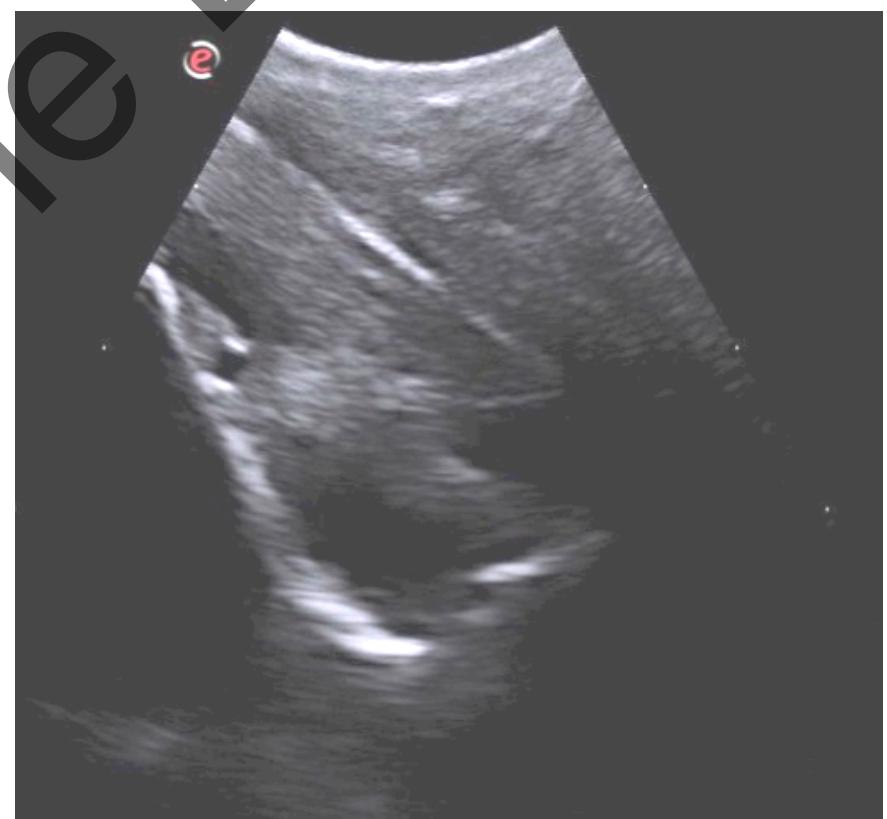
# Foot pain

◆ X rays ?



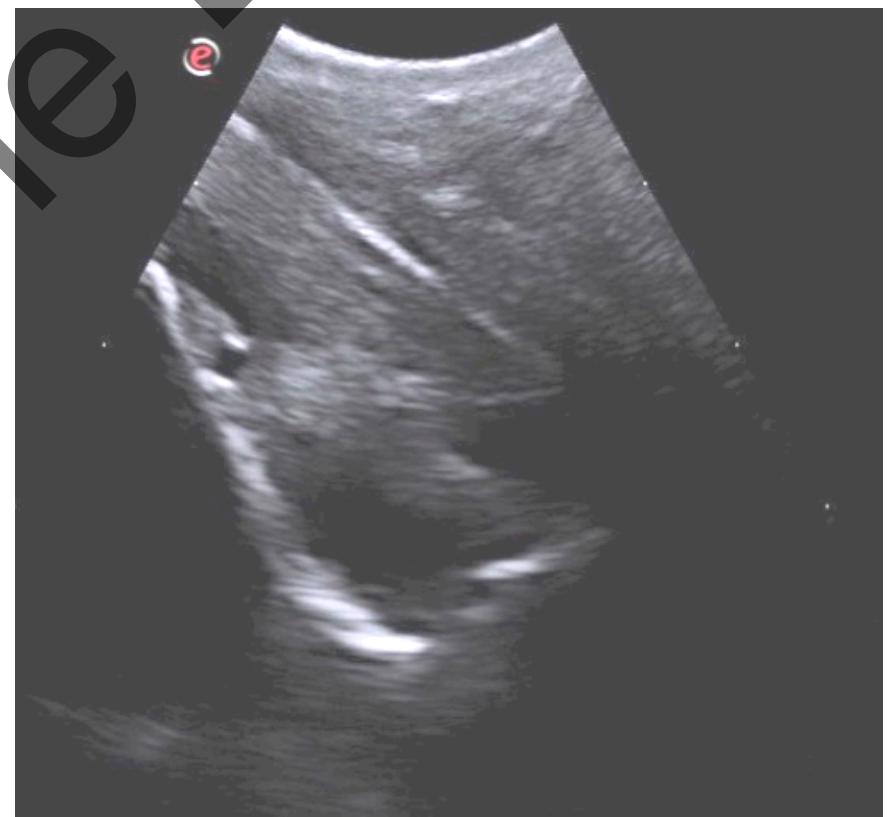
Foot pain

- ◆ Ultrasonography ?



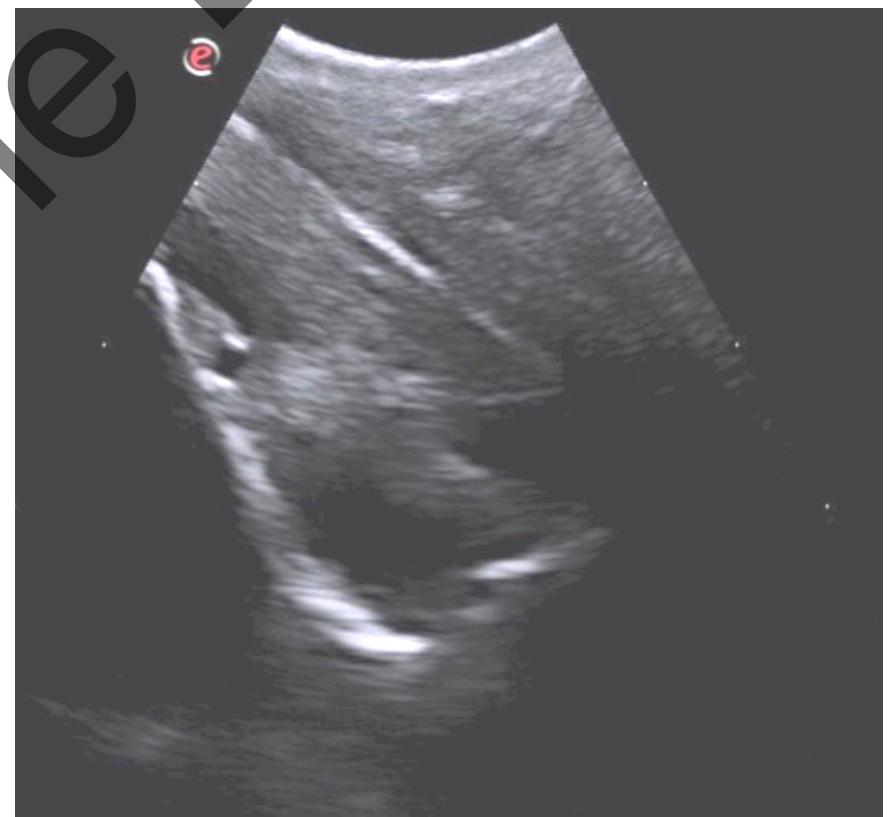
## Foot pain

◆ Ultrasonography ?



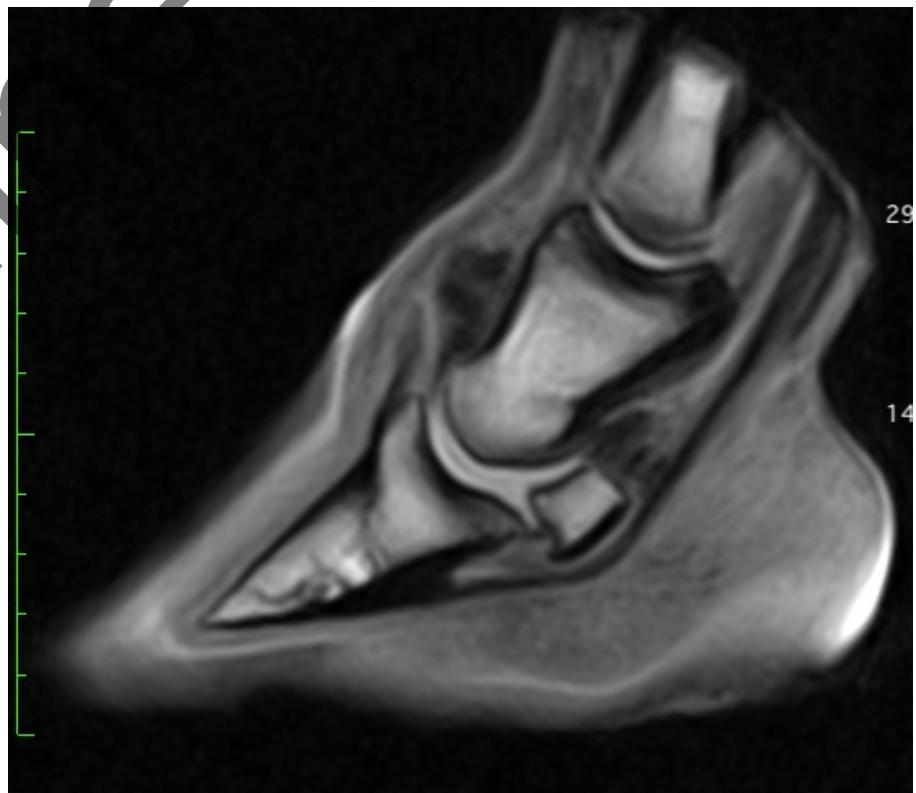
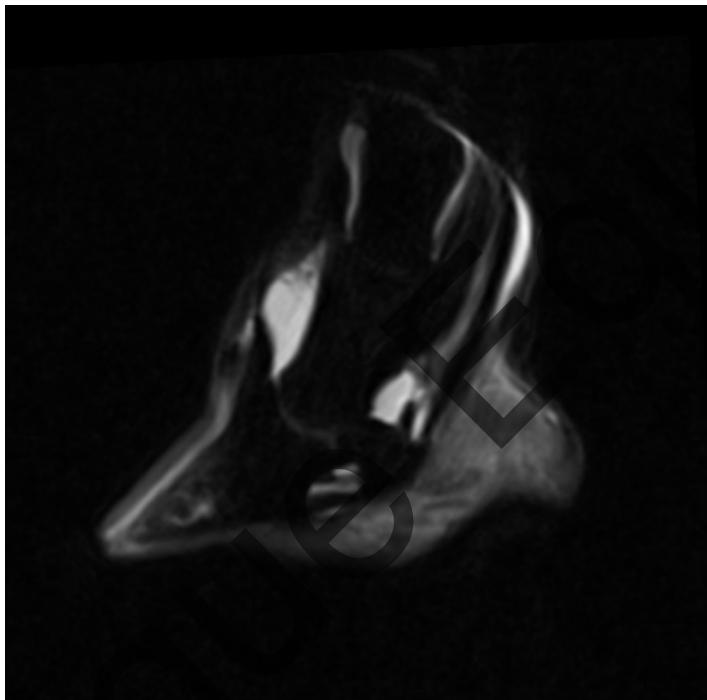
Foot pain

◆ Ultrasonography ?



# Foot pain

◆ MRI ?



2020

## Foot pain

◆ So :

- One lesion
  - Distention of the distal inter-phalangeal joint
- What doing ?
  - Infiltration:
    - » Steroids ? PRP ? Hyaloronic acid ? .....

## **Foot pain**

- ◆ But :
  - After infiltration the horse is always lame
- ◆ The owner spent a lot of money and no results
- ◆ Where are the mistakes ?



## Foot pain

- ◆ Without a correct exam you can't do a good interpretation of pictures :
  - Look at the lameness, doing flexion tests, doing a block are not enough
- ◆ Remember :
  - With a good exam you can do a diagnosis without pictures
  - With a good exam and good pictures you can do a good diagnosis

## Foot pain

### ◆ What means a good exam ?

- Listen the owner
- Statistics
- Be systematic
  - First static exam
  - Dynamic exam after
- Look look look and look again
- Have good tools
  - You have to know how to use them
  - You have to know what they means

Do and use of the result of the palmar distal digital block correctly

## Foot pain

### ◆ Listen the owner :

- Lameness after sport effort :
  - Ligament, tendon
- Lameness in the field :
  - Digital laminae
- Acute lameness after falling to the ground:
  - Fracture
- Chronic lameness :
  - OA or distal sesamoid bone



## Foot pain

### ◆ Statistics :

- Digital laminae : the most frequent lameness
  - Cracks, abces, bruise, lost of elasticity of hoof, to much elasticity of hoof ...



## Foot pain

### ◆ Statistics :

- Digital laminae : the most frequent lameness
  - Farrier :

- » To much trimming
- » Nails



## Foot pain

### ◆ Statistics :

- Digital laminae : the most frequent lameness
  - Veterinary :
    - Break over !
    - Orthopedic shoes
    - Pads



2020



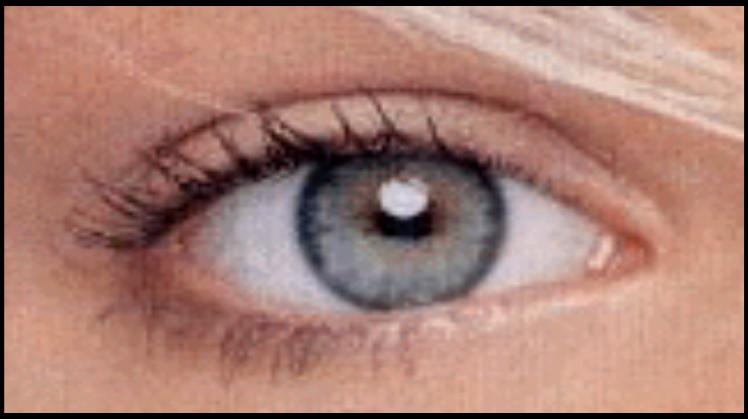
- ◆ Palpation
- ◆ Look look look



Foot pain



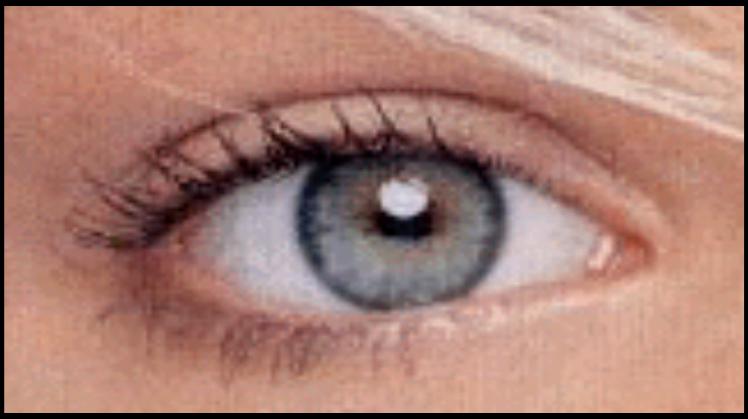
2020



## Foot pain

- ◆ Palpation
- ◆ Look look look





- ◆ Palpation
- ◆ Look look look



## Foot pain



## Foot pain



### ◆ Have good tools

- You have to know how to use them
- You have to know what they means



Foot pain



2020

## Foot pain



2020

## Foot pain



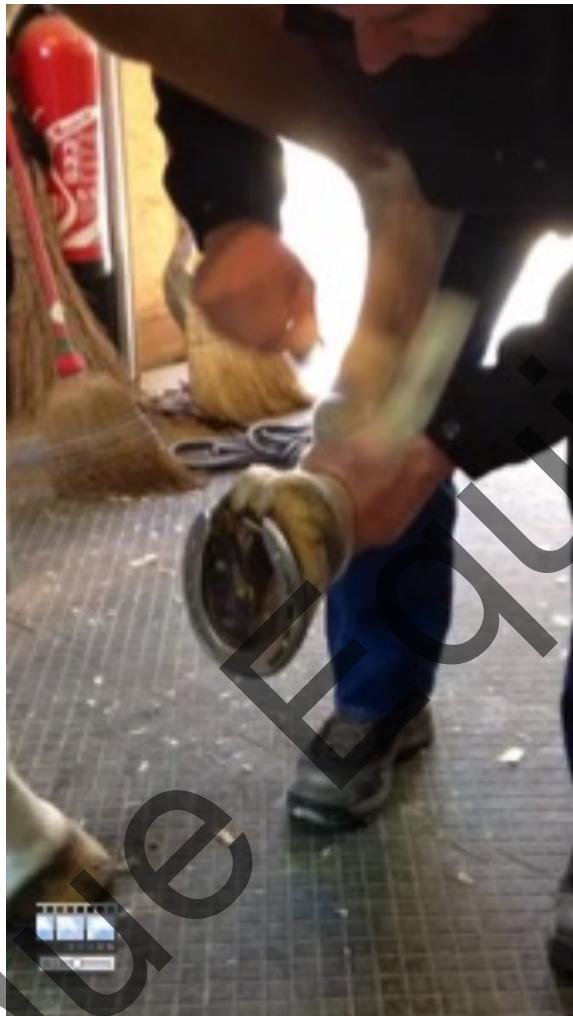
2020

## Foot pain



2020

# Foot pain



2020

# Foot pain



2020

## Foot pain



2020

**Foot pain**

◆ Locomotion



# Foot pain



2020

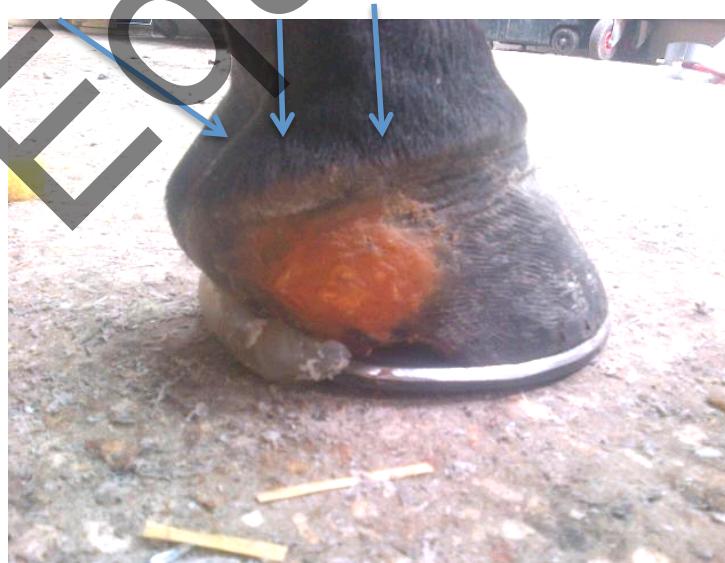
# Foot pain



2020

## Foot pain

- ◆ Use the palmar distal digital block correctly
  - 1 : Control if this test is working
  - 2 : If you have a doubt do again





## Foot pain

- ◆ Use the palmar distal digital block correctly
  - 1 : is the block working on the tests, hoof testers, hammer or board test ?
    - Working on the lameness
    - Non working on the lameness
  - 2 : is the block working rapidly (less than 2 mn) ?
  - 3 : is the block working at 10 mn ?



## Foot pain

### ◆ What it means ?

- 1 : is the block working on the tests, hoof testers, hammer or board test ?
  - » Working on the lameness :
    - The test is very interesting
  - » Non working on the lameness
    - The test is not interesting
- 2 : is the block working rapidly (less than 2 mn) ?
  - » Pain near the distal sesamoid bone
- 3 : is the block working at 10 mn ?
  - » Pain of the digital laminae



## Foot pain

- ◆ If you think it is a digital laminæ lameness
  - Use the hoof testers :
    - On the foot with the shoe
    - On the foot without the shoe
    - On the foot after trimming
    - On the foot after shoeing
  - Work with the farrier

## Foot pain



2020

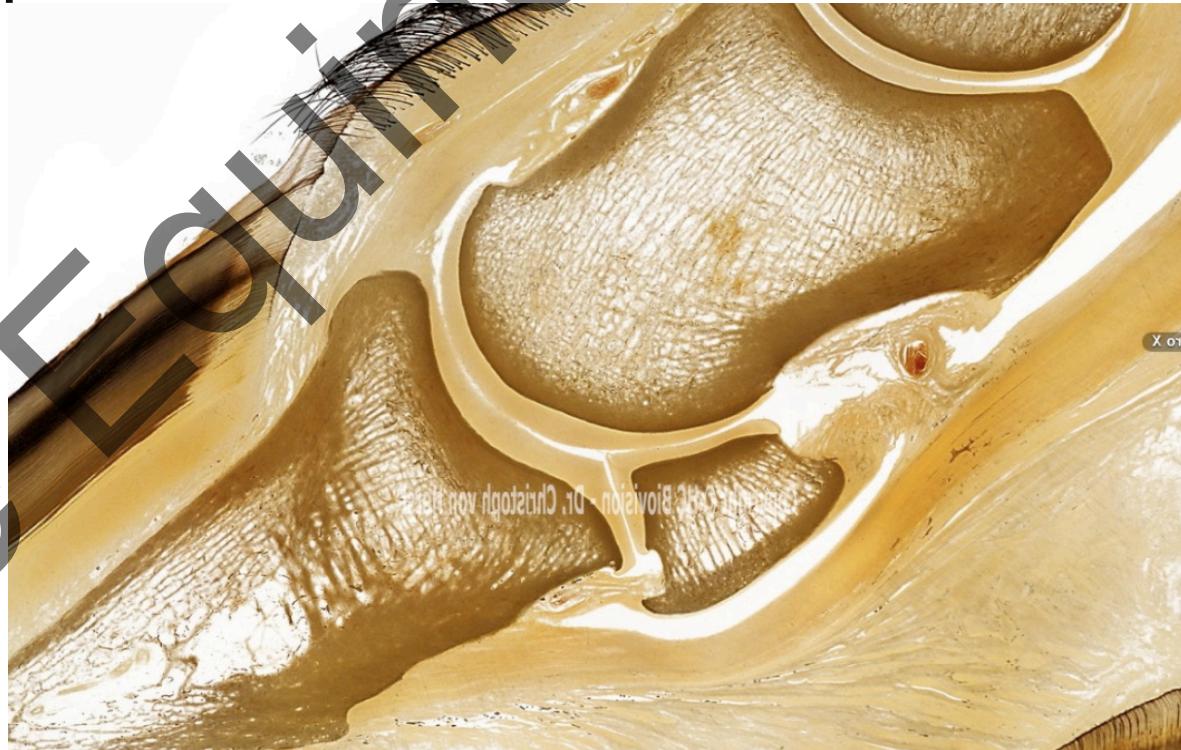
## Foot pain

- ◆ If you think it is a digital laminæ lameness
  - Remove one nail



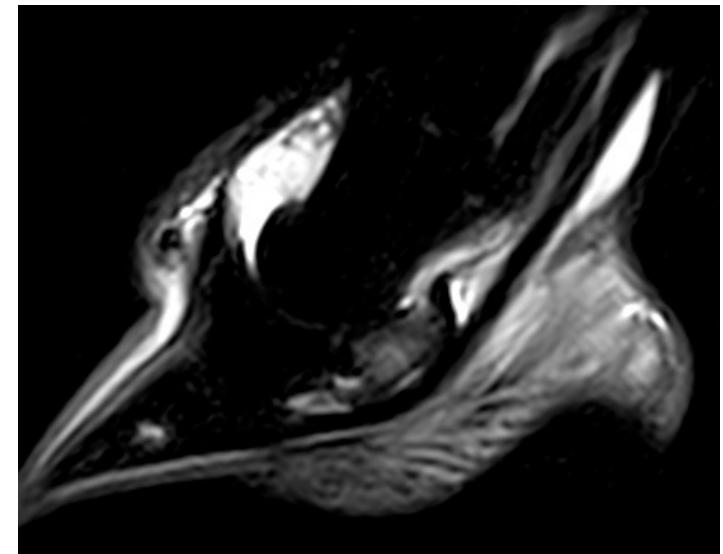
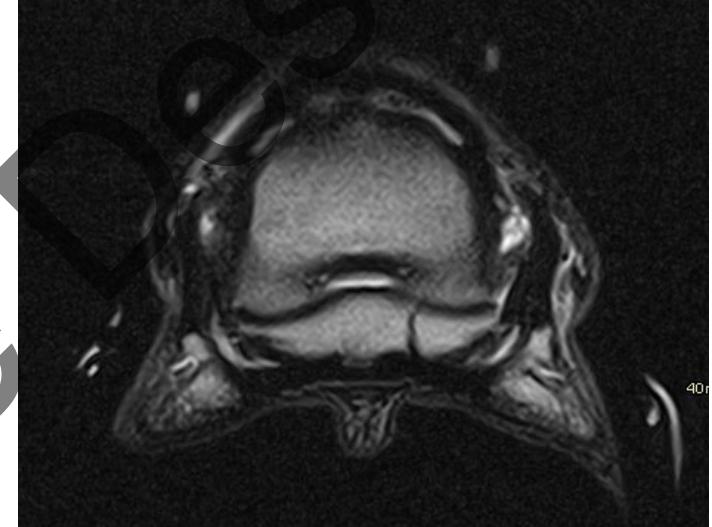
## Foot pain

- ◆ What kind of pain ?
  - Bone pain



## Foot pain

- ◆ Distal sesamoid bone :
  - Fracture
  - Bone oedema
- ◆ The most interesting test
  - **Board test**



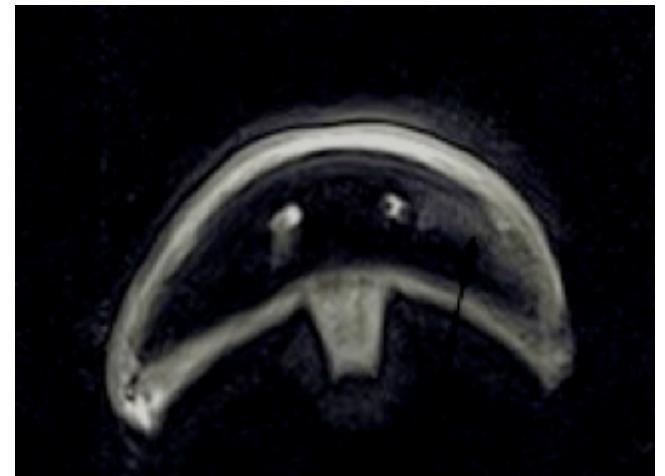
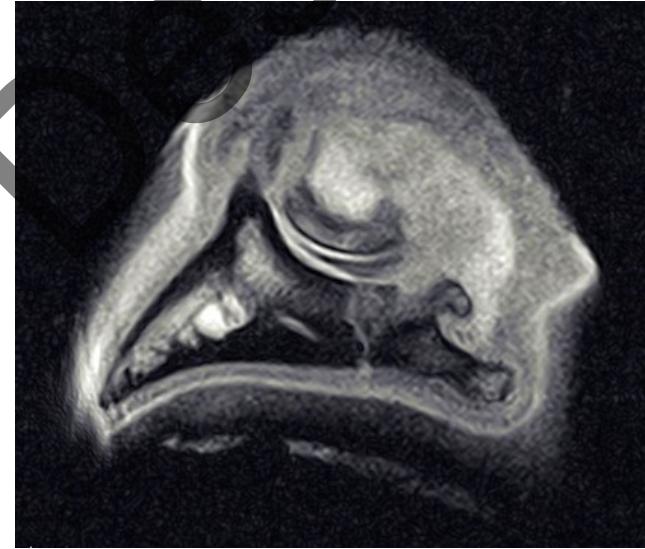
## Foot pain

### ◆ Distal sesamoid bone :

- Toe extension test was only positively correlated with MRI abnormalities of the distal sesamoid bone medulla ( $r = 0.355$ ,  $p = 0.005$ ).
- Toe extension test was not positive on a non lame limb

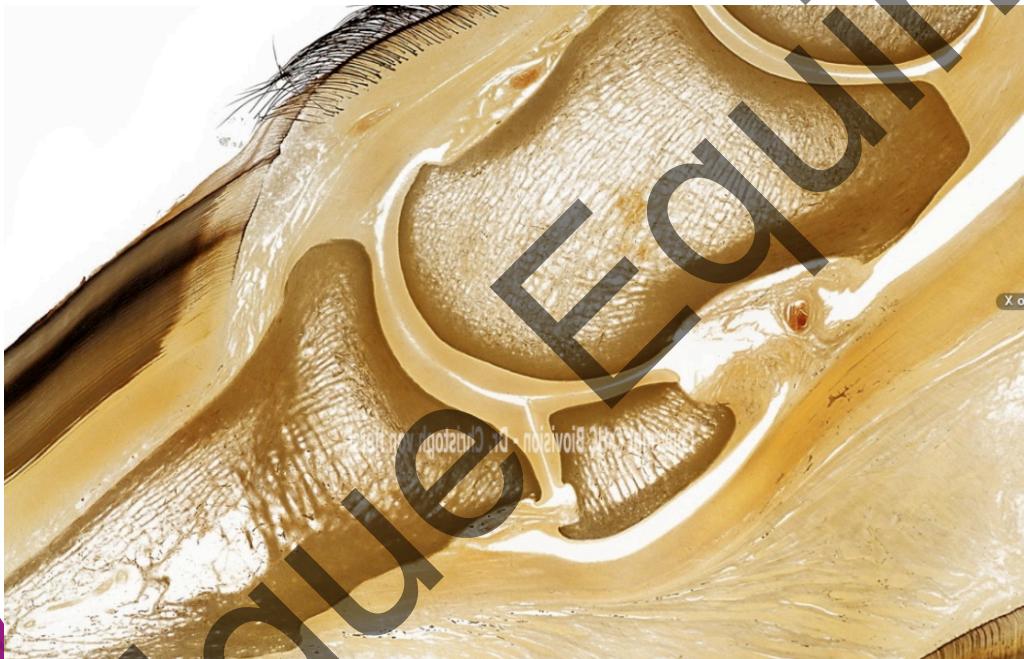
## Foot pain

- ◆ Third phalanx:
  - Fracture
  - Bone oedema
- ◆ The most interesting test :
  - Hammer



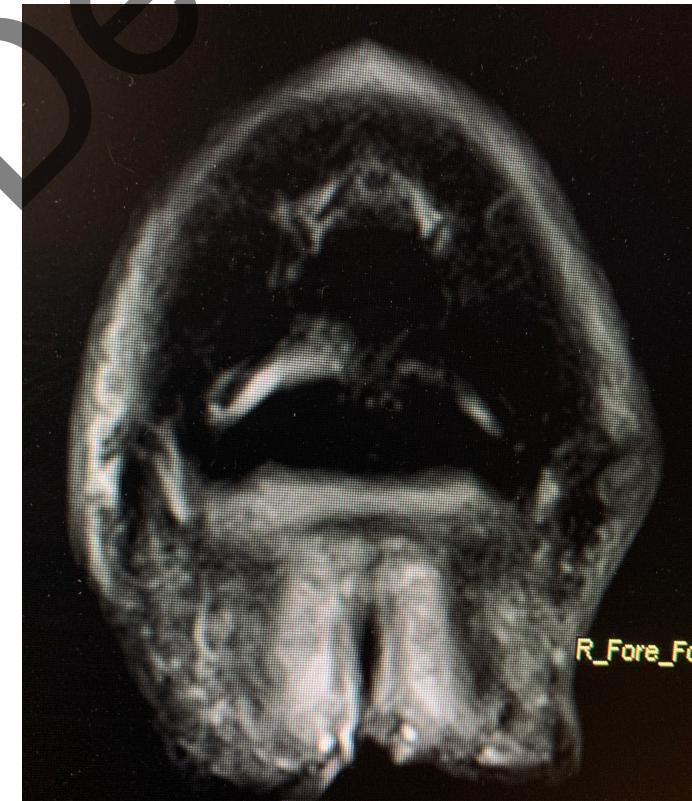
## Foot pain

- ◆ What kind of pain ?
  - Ligament pain





Foot pain



- ◆ Sesamoid bone ligament
  - Distal
  - Proximal
- ◆ The most interesting test :
  - **Trotting on the cercle on hard ground**



Foot pain



- ◆ Sesamoid bone ligament
  - Distal
  - Proximal
- ◆ The most interesting test :
  - **Trotting on the cercle on hard ground**
  - Why ?

# Foot pain



2020

## Foot pain

### ◆ What kind of pain ?

- Enthesopathy
  - Ligament
  - Joint capsule
  - DFT

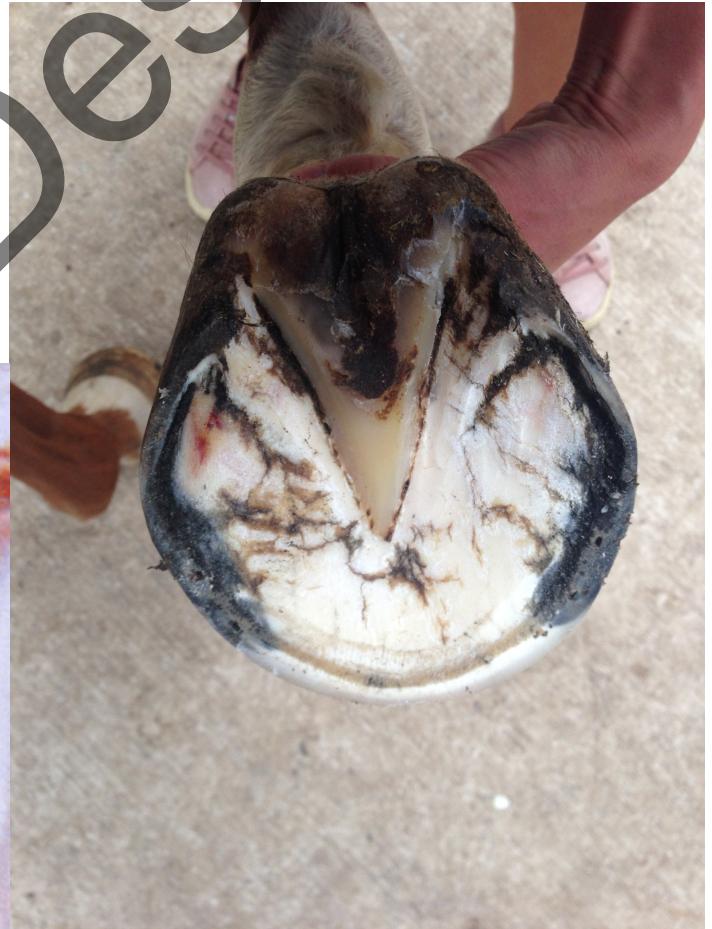
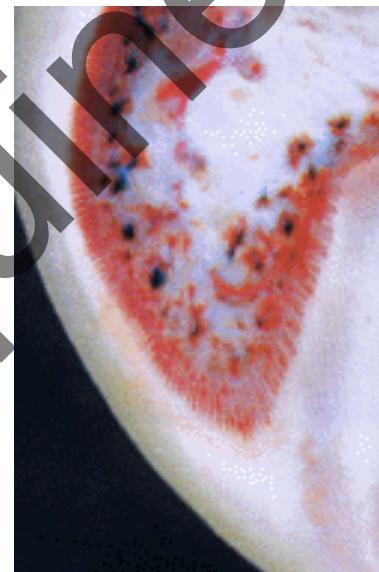
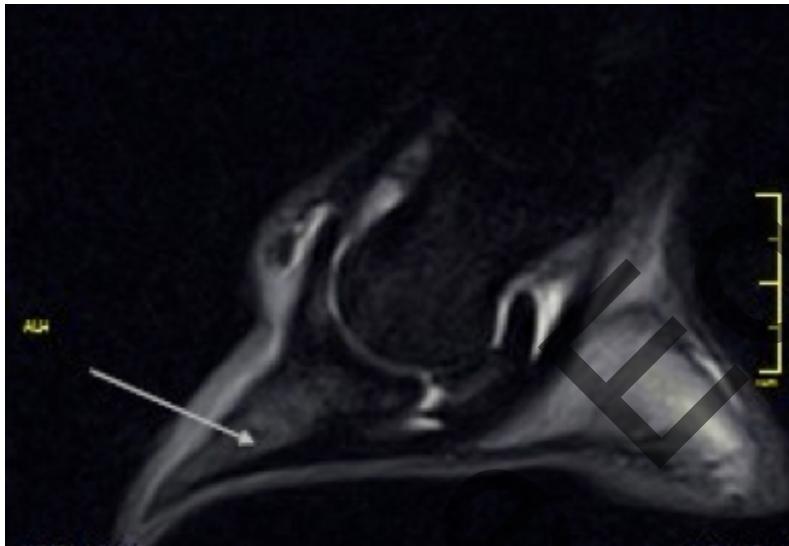


- The most interesting test :

**– Trotting on the cercle on hard ground**

## Foot pain

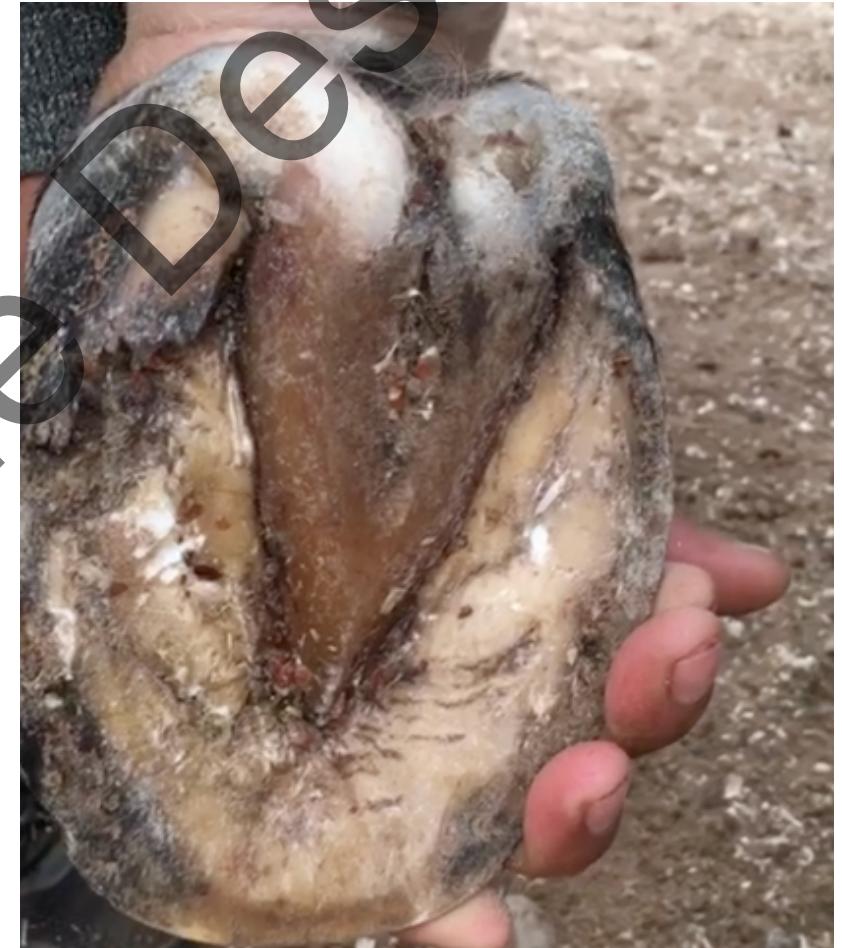
- ◆ What kind of pain ?
  - Digital laminae



- ◆ The most interesting test :  
**Hoof testers**

## Foot pain

- ◆ What kind of pain ?
  - Digital laminae



- ◆ The most interesting test :
  - **Hoof testers**

## Foot pain

- ◆ What kind of pain ?
  - Digital laminae

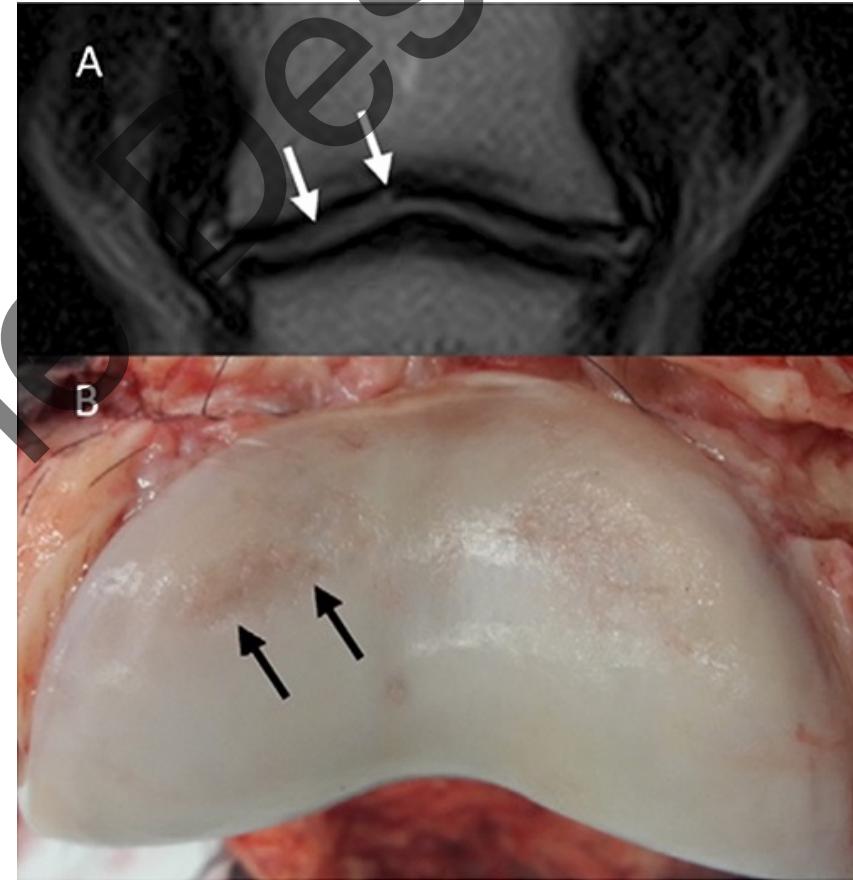


- ◆ More interesting test :
  - Hoof testers

## Foot pain

◆ What kind of pain ?

–Joint pain

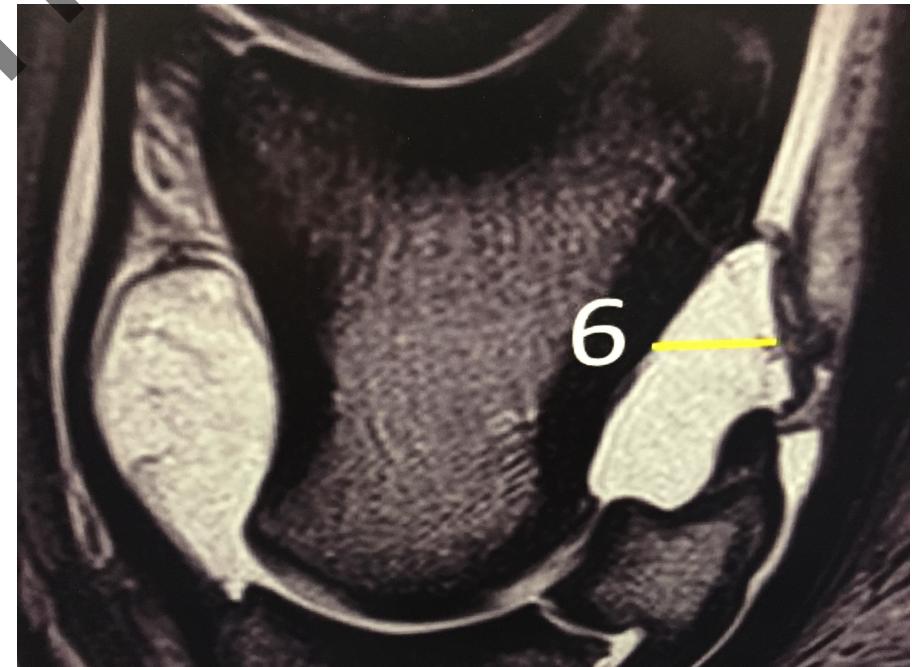
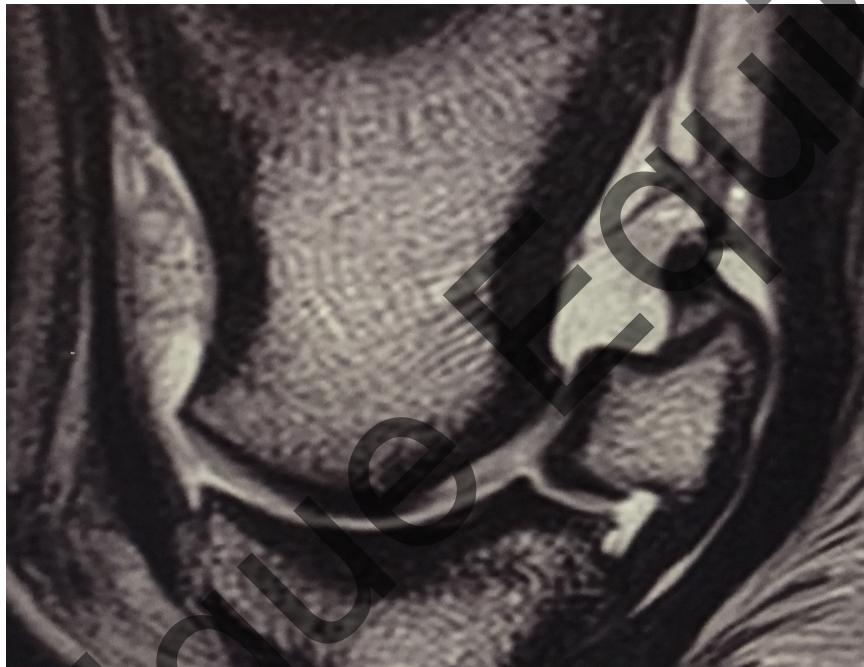


The most interesting test :

–Trotting on the cercle on hard ground

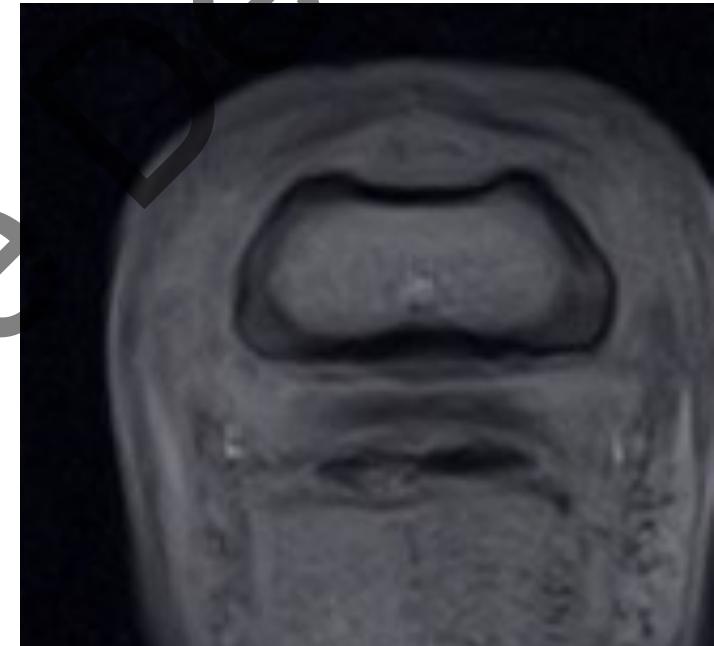
## Foot pain

- ◆ Human studies: pain associated with bone edema , but not with extent of effusion (Hill et al, 2007)
- ◆ Septic arthritis

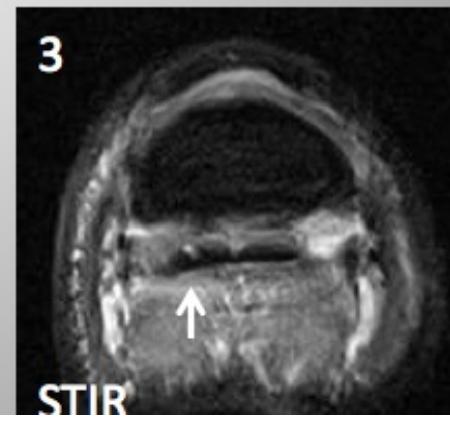
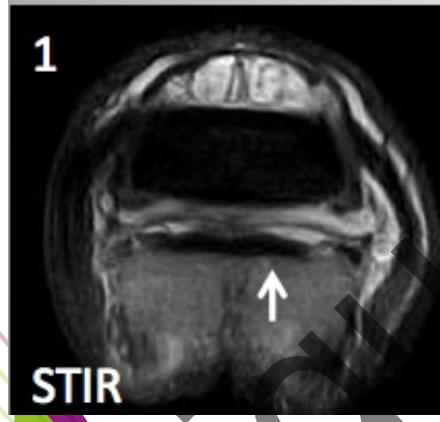
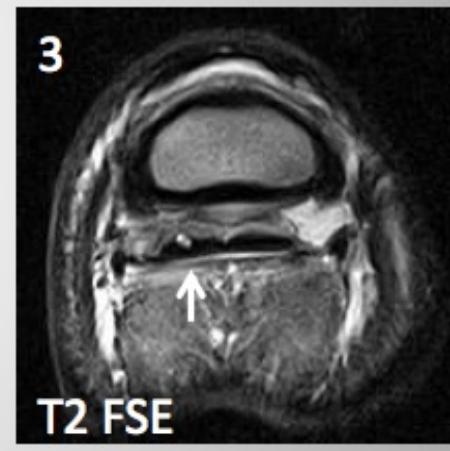
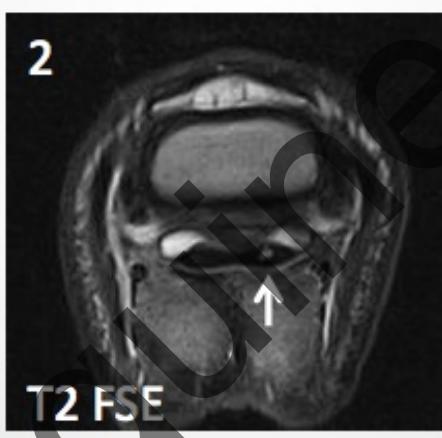
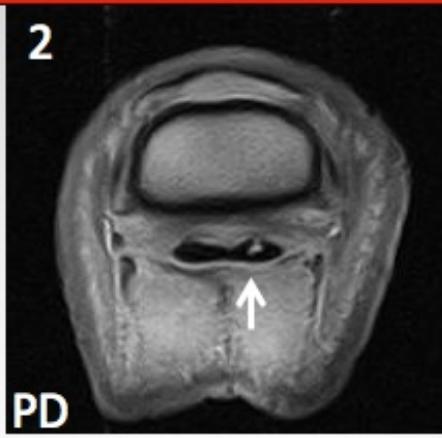
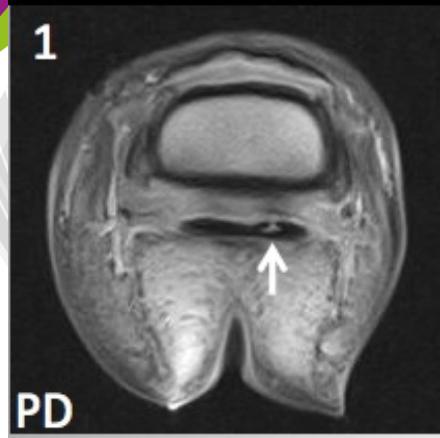


## Foot pain

- ◆ What kind of pain ?
  - DDFT



- ◆ The most interesting test :
  - Trotting straight on hard ground**
  - Trotting on the cercle on hard ground**



Natasha Wherpi Bonn 2017

2020

A lame horse



2020

## Foot pain

- ◆ What kind of pain ?





Questions ?

Clinique Equine  
DESBROSSE  
2020

Questions ?  
Clinique Equine Desbrosses



Clinique Equine  
DESBROSSE