

**The Department of Farriery Science, Myerscough College
and the first german Student from the FdSc Course
Jürgen Gotthardt proudly present:**

Degenerative Hock Joint

Power Point Show



There is nothing more frustrating than a lame Horse

Module MR 2146 : Lameness in Horses a clinical Case Study Report



Lameness and remedial shoeing

Is dependant on the science and how forces such as weight & inertia influence a structure (hock joint)

Function or dysfunction of the limb (whole Horse)



Aetiology

Confirmation faults
have a
direct influence
to
abnormal forces
to the hock



Pathogenesis

Incorrect conformation

Abnormal biomechanical stresses

Disease

lameness



Reason for the Study

Horseshoeing today in the modern Sport

Horses are more reliant than ever on the knowlege and skills of the farrier to maintain their soundness and performance.

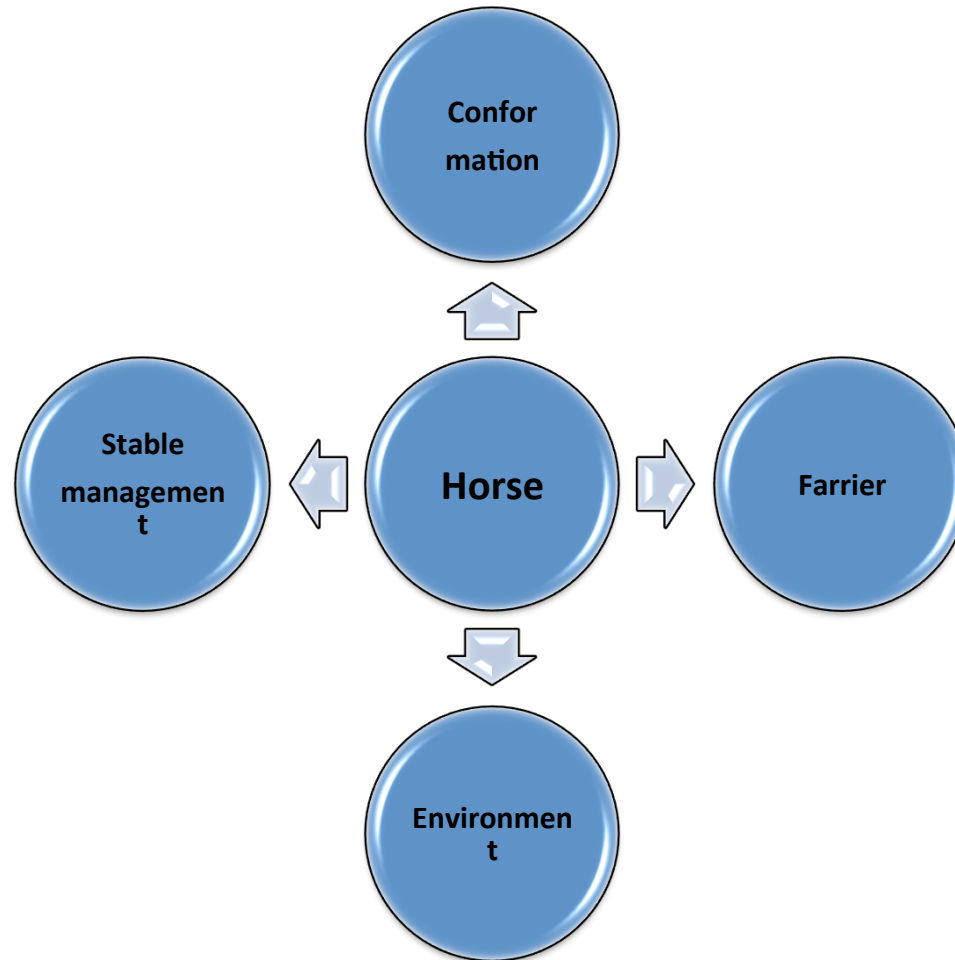
pro-aktiv

and

reaktiv



What have an Influence of the Horse's Hock - Joint



Clinical Signs

Will be depend on knowledge and observations

1. Each individual Horse
 - age, breed,
 - typ, confirmation
2. Owner, Rider, Trainer report
 - lost performance
 - back pain
3. Farriers
4. lameness assessment
 - static
 - dynamic



Clinical Signs

- back and distal joint pain
 - muscle atrophy hindquarters
 - asymmetry movement
 - stridelenlength is shorten
-
- changes on the footshape
 1. Sheared Heels
 2. Broken Hoof patern axis
 3. Low week heels
 4. Lateral flare
 5. Lateral Heel contraction



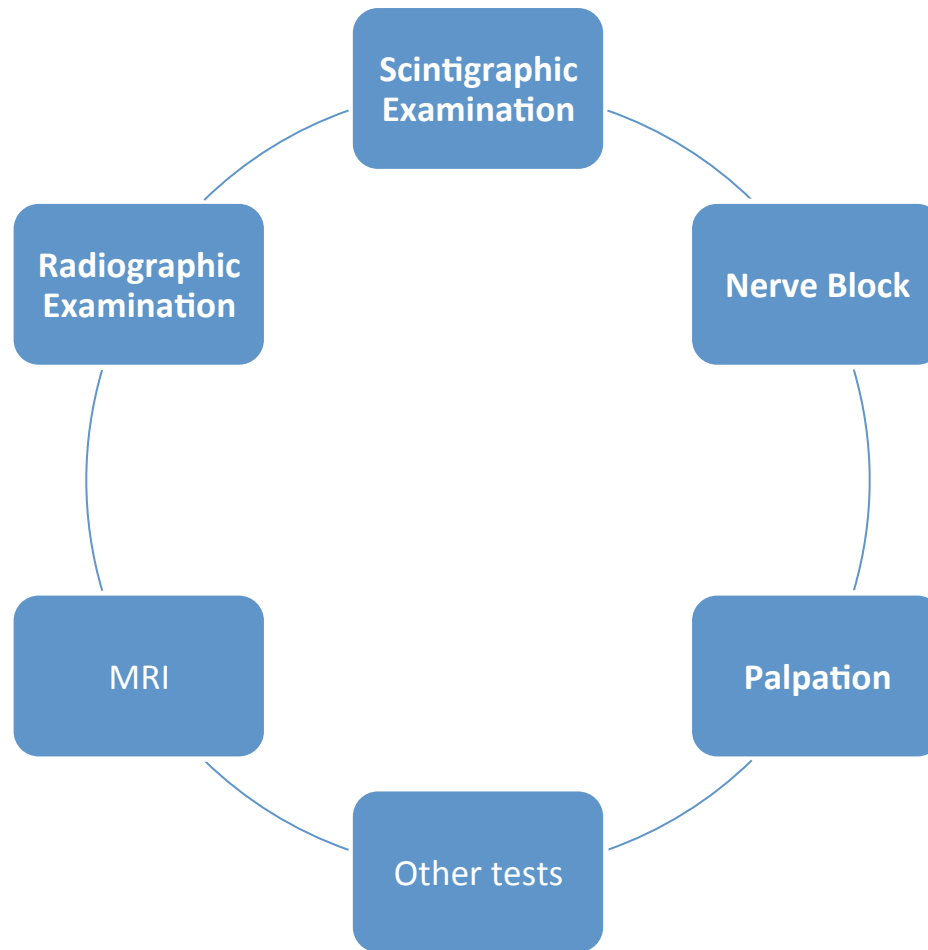
Shoe Wear

**Specific shoe wear
will be a
mirror image
of the stress
and a result of
unphysiologic forces**

(toe and medial branch)



Veterinary Diagnostic



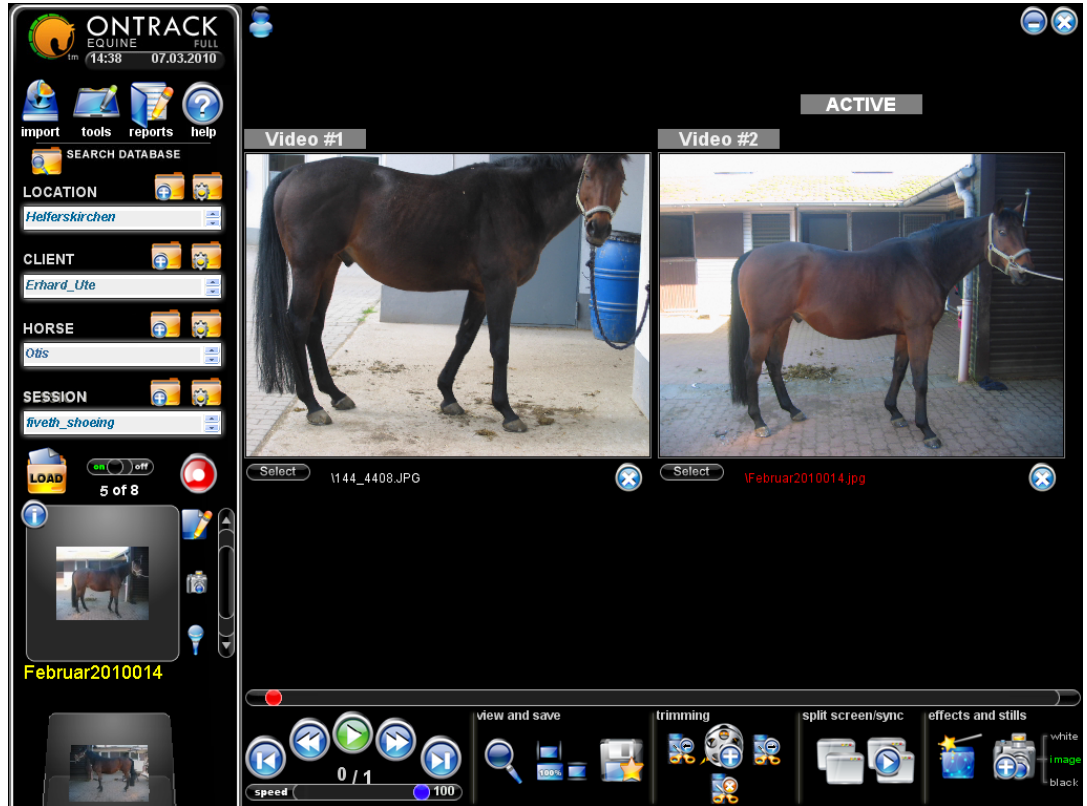
Medication and Nutrition

as a part to help

- Anti – inflammatory
- Reduce pain
- Painkiller
- Normal synovial fluid
- Bute
- Glucosamine
- Chondroitin
- Hyaluron

Farrier Treatment

The farriers role is to
provide effective
treatment by restoring
mechanical equilibrium
and thus efficiency



Horses and Groups



My Customers horses split into two Groups

a) The „clinical signs Group“ (10 Horses)

and

b) the „diagnosed Group“ (5 Horses)

someResults

- **In both Tabela it was min 60% of the Horses affected on both hind limbs**
- **80% was sickle hock** (observed by the farrier)
- **100% was base narrow** (observed by the farrier)
- **80% had broken Hoof pastern axis** (observed by the farrier)
- **80% had sheared heels** (observed by the vet)
- **80% had medio/lat Asymmetry solar view** (observed by the vet)

Discussion

Both Tabela show conformation faults and changes in foot shape

What is further to do from the vet and with diagnostic tools like MRI, X-ray, etc is to be used

Conclusion

The Study show :

- A relationship exist that(clinical Signs)
z.B. skeletal alignment , changes in foot
shape, etc
will have an effect (inappropriate forces)
to the hockjoint.
- The farrier could be note every time
some (pre) clinical signs and changes
what will be address to an(common)
diseases
- together with further diagnosed tool
and a equine Veterianary it is to
select and compensate,comfortable
weight bearing platform (Horseshoe)
due to soundness
and back to performance
- a degenerative hockjoint Such as spavin is more
link
to poor footshape
than to horse conformation faults



Clinical Relevance

The veteran farrier is in the role to see

- the early and develop signs of the disease
- understand the mechanics of the horse
- could make and fit any type of compensating and comfortable Horseshoes



Clinical Relevance

- The results clearly demonstrate that whilst all the horses in both groups clearly demonstrate a level of hock related lameness modern “in the field” veterinary medicine is focused down on diagnostics largely ignoring causative factors such as conformation, hoof capsule morphology and associated clinical signs such as shoe wear etc.
- Treatments for horses diagnosed with degenerative joint changes are largely focused on palliative measures ignoring what many agree as contributory causative factors.
- Perhaps given the range of clinical signs available to the farrier on a 6 week shoeing/trimming cycle, shoe wear, hoof capsule morphology, skeletal orientation and changes in horses performance by the owner, a degree of predictability of hock pathologies might be possible and preventative treatments could be investigated earlier.

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