First Congress

International Society of Diamagnetic Therapy

“Diamagnetic shock waves in equine medicine”

13th – 14th September 2024
Magna Graecia University - Catanzaro

Mag. Christina Pasterk

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Main performance spectrum

Orthopedics and Rehabilitation
Surgery
Internal Medicine
Diagnostic imaging

- Ultrasound
- X-Ray
- CT
- MRI

Emergency Clinic

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Use of diamagnetic shock waves
In equine medicine

Soft tissue lesions

- Insertion tendinopathy of the suspensory ligament
- Core lesions in tendons – SDFT, DDFT, Suspensory ligament
- Desmopathies
- Bursitis
- Fascial pain
- Muscle-pain/back pain
- Wound management
- Neuropathy after acute trauma

Bone

- Support fracture healing
- Bone oedema
- Bone necrosis
- Chondropathies/Arthropathies

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Suspected and known effects of the ESWT - „Veterinary“ point of view

Mechanotransduction

- Neoangiogenesis
- Expression of GFs
- Replication and Differentiation of MSCs

- Analgesic effect

Diamagnetic Effect

- Biologic effects on cells
- Drainage ECM

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Suspected effects and effords of the treatment – of the „owners“ point of view

- Painfree and comfortable treatment
- No need to sedate the horse
- Being „mobile“
- Quicker recovery/shorter rehab period
- Long lasting effect

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Advanteges of the CTU-S Wave compared to other ECSW devices

Painless treatment

no sedation of the horse
no stress for the horse

Diamagnetic Effect

Reduce swelling
Drainage-effect

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Painfree treatment

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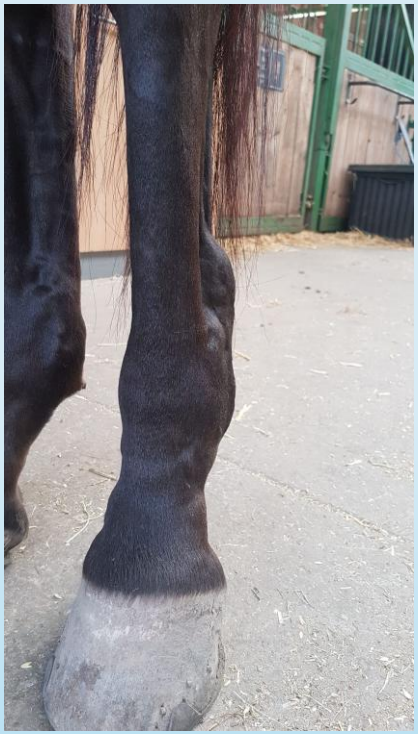
Diamagnetic effect

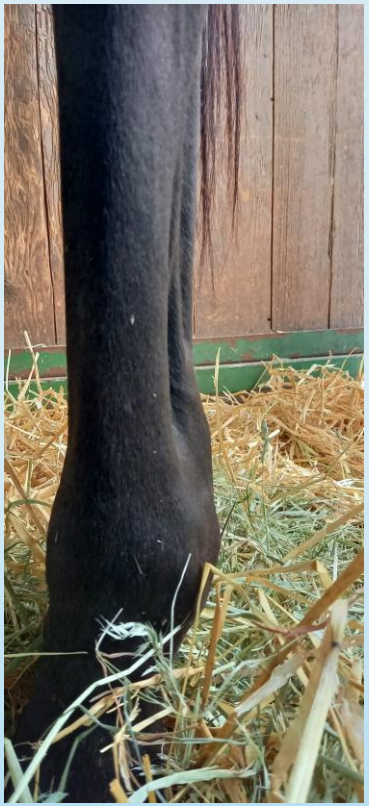


5 treatments

interval 1 week

Focused at the point of lesion (20)

Radial up the whole leg



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„Seppl“ – Van Tango

- 15 years old Oldenburger Gelding
- Lame since 1 year on the left hind
- High grade swelling of the tendon sheath of the flexor tendons
- Ultrasound: fibrinous filling of the tendon sheath, DDFT enlarged, with an inhomogenous strukture
- Home Vet: „Last chance = surgery with bad prognosis“

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Long term outcome – „Seppl“

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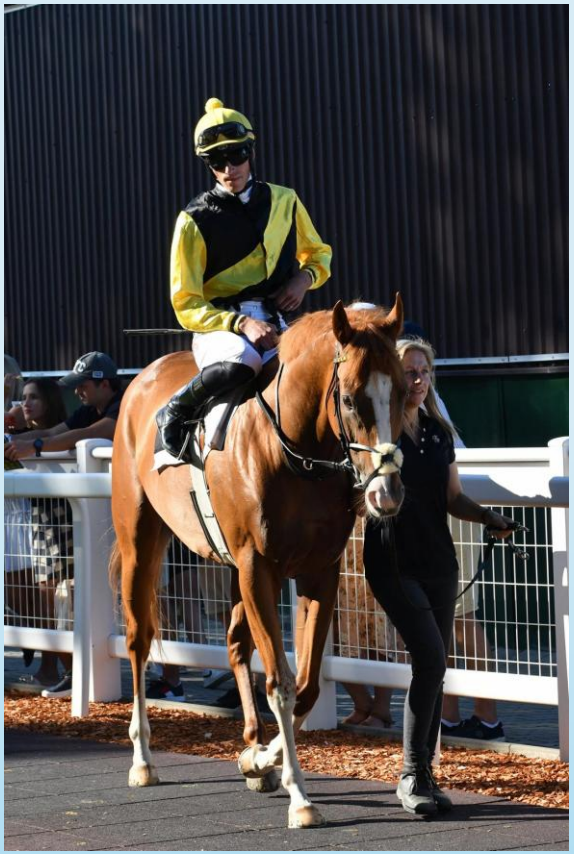
Case report #2
„Lady free“

5 years old english thoroughbred filly
Active race horse



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Clinical Symptoms

- Pain reaction during grooming on the back
- Pain reaction when saddling and getting on the horse
- Very short in movement
- Gets usually better when warmed up
- Dosen‘t bring good results in racing

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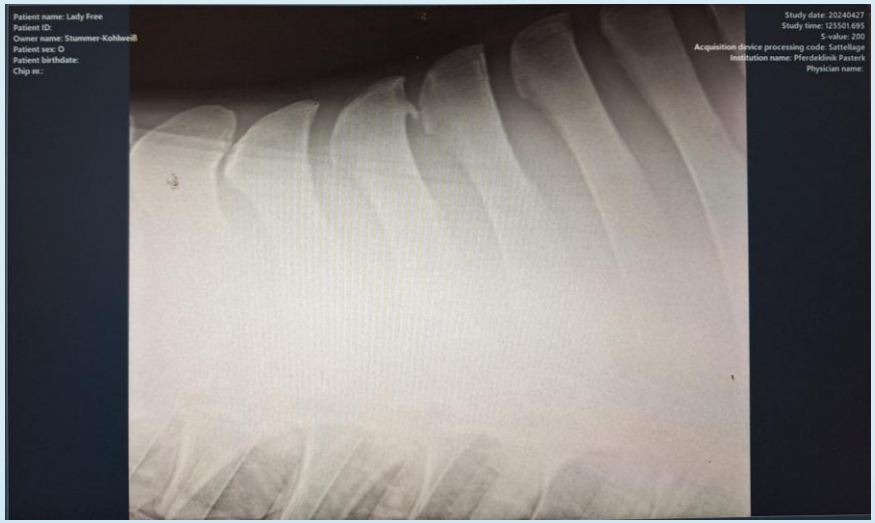
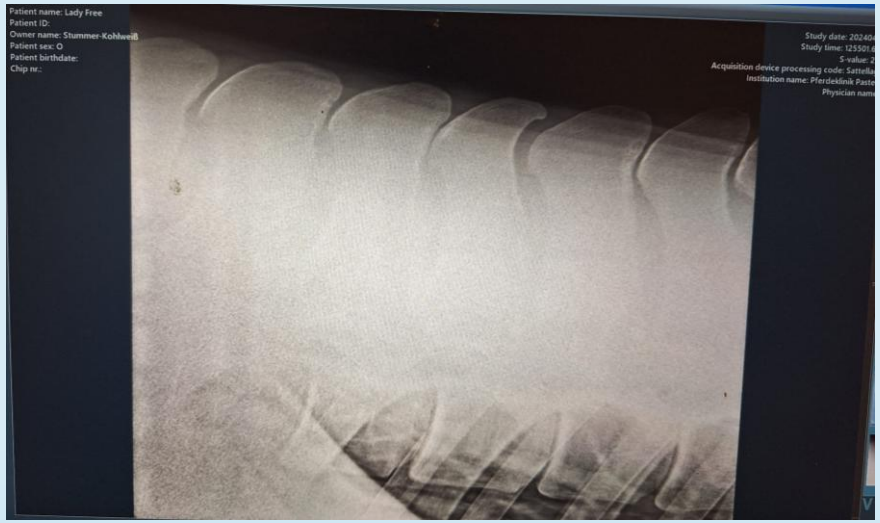
Radiology





Diagnosis: „Kissing spine“

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Treatment

- 3 shock wave sessions
- Interval 1 week
- Parallel to the spine
- Direct on Procc. Spinosi
- Lense: focused 40+60
- Core exercises
- Feeding supplements to support the general mussle condition (Vit B, VitE, Selen)

Disgregante	High	15-18	12	40
Drenante	High	18	10	180
Stimolante	High	20	15	40

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Short term outcome – „Lady free“

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Clinical study

In cooperation with Dr. Claudia Siedler, Vetmeduni Vienna
Aim is to evaluate the effectiveness of the diamagnetic shock wave in different orthopedic pathologies in the horse

Horses included in the study must

- Have an exact diagnoses of the pathology – X-ray/Ultrasound/CT/MRI
- Not be treated 4 weeks before, during and 8 weeks after the therapy with Corticosteroids

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Pathologies included

- Suspensory ligament desmopathies
- SDFT, DDFT, Check ligament and suspensory lesions
- Collateral ligament lesions
- Arthropathies
- Bone edames (navicular bone/fetlock bone)
- Splint bone fractures in conservative therapy
- Kissing spines
- Faccet joint pathologies of the cervical spine

- Wounds

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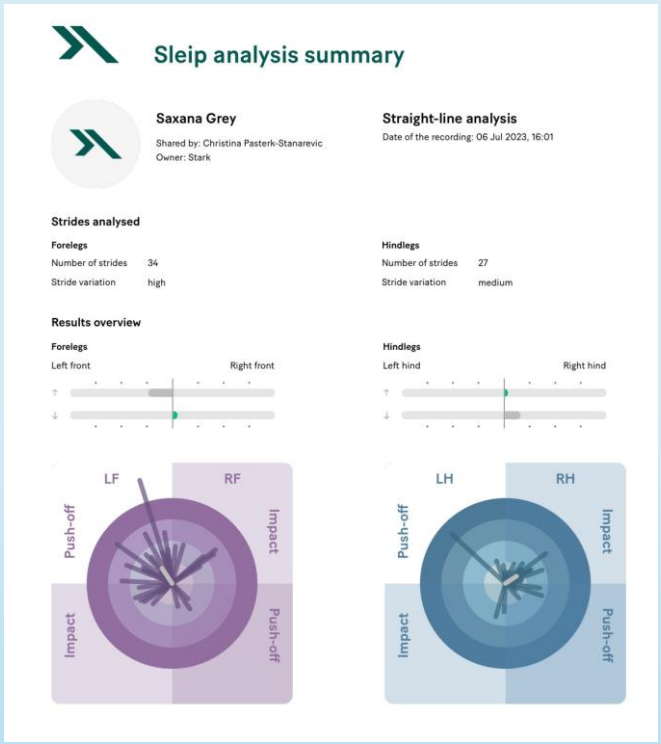
Protocoll

Clinical examination before and after every treatment:

- Orthopaedic examination on the standing horse
- Orthopaedic examination in walk and trott:
  on hard ground straight line
  in trot on the circle on the soft ground on both hands
- Objective gait analysis with „SLEIP“
- In Cervical, thoracical and lumbal spine patholigies:
- Movement of the neck and back



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Treatment protocoll

- 4 sessions
- Interval 1 week
- Exact treatment protocoll will be set when the new „CTU-S Wave“ device is ready to go
- Examinations as the protocoll before 4 weeks and 8 weeks after the 4 treatment sessions
- Planned cases:
  Total of 50 horses
  Minimum 4-5 horses per pathology

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Thank you for your attention

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