

Horse and Rider – Systems in Interaction

Online Seminar EVSO
26.04.2022

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Horse and Rider – Systems in Interaction



- How Horse and Rider (should) move together
- Why Equine Vets should care about Riding and Training
- Requirements of the rider
- Requirements of the horse
- Osteopathic Diagnostic and Treatment Techniques
- Cases

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Introduction



Veterinary Practice for

- Osteopathy
- Equine Dentistry
- Training Advice

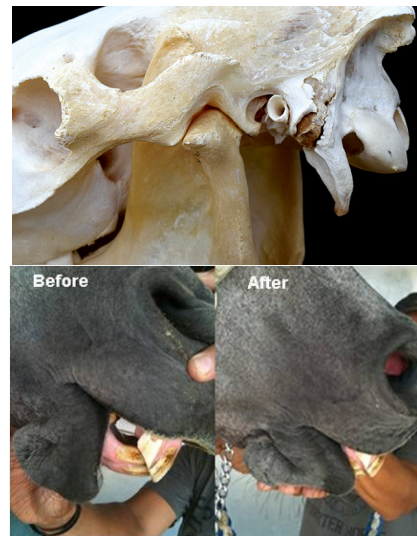


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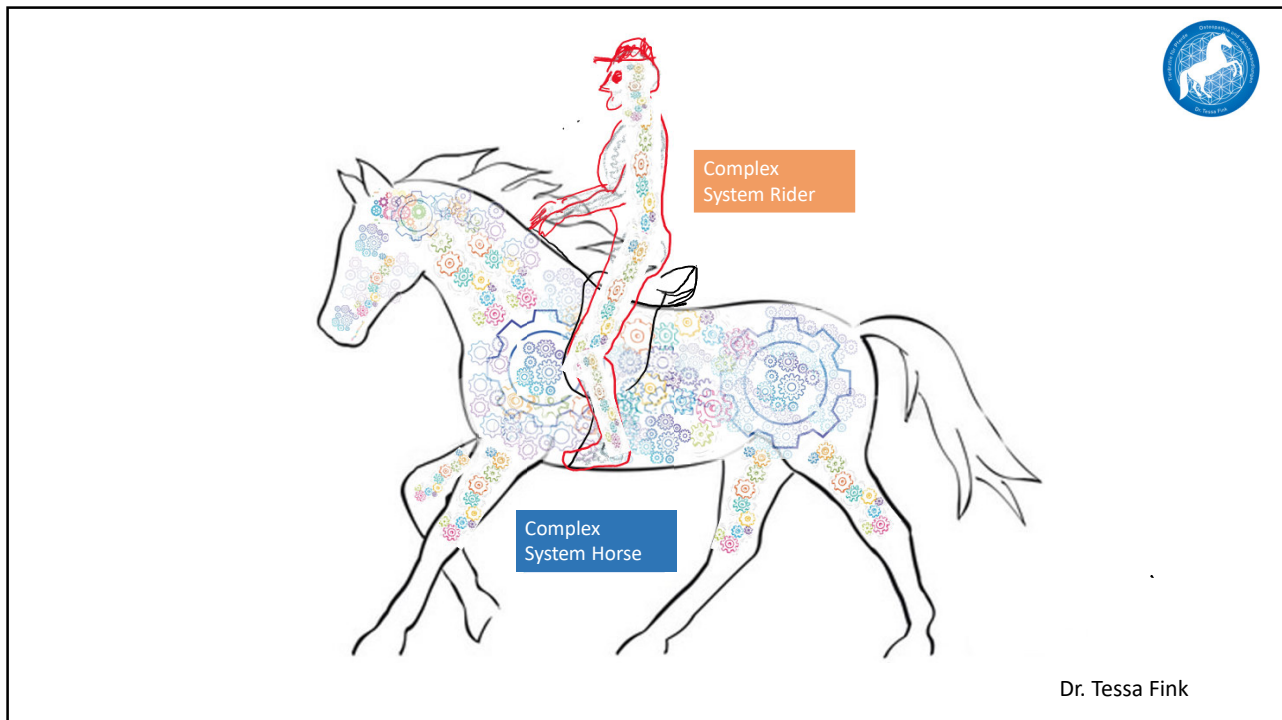
Why Dentistry?



Prof. Vibeke Elbrond, Kopenhagen



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Why vets should get interested in Riding

- Riders often grown-up, intelligent, inquisitive but inexperienced
- Many new riding styles and philosophies "on the market", riding instructors with large or small fields of experience
- Modern horses are ready to learn, fine, not very forgiving, susceptible to degenerative diseases
- Maintaining health can only be achieved through meaningful daily work

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Why vets should get interested in Riding

- Habitual posture
- "The rider shapes his horse"
- If you ride a horse then neatly! *E.g.: Donna 19j WB St*
- Veterinarians must be able to classify whether a horse is able to meet the requirements of its riders/instructors *E.g.: Ronaldo 13j WB Wa*
- If you look at a rural tournament, a well-ridden and well-muscled horse is the exception rather than the rule

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Riding and veterinary medicine

- Customers contact veterinarians with rideability questions
- We osteopaths are often the first to be called when the riders notice something!
- Academic/Scientific Work:
 1. Scientific publications include rideability problems, performance degradation, ridden behaviour problems, poor performance
 2. It is important that we can classify symptoms correctly.
 3. Example: "My horse is so firm on the left."

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How does the rider move?

Full seat – sitting trot



Half Seat – 2 Point Position



www.bewegungstrainer-
ern.org/index.php/buecher_medien/



Wie bewegt sich der Reiter?:
Bewegungsabläufe verstehen, Sitz
und Hilfestellung verbessern
von Eckart Meyners

<https://www.toffi-images.de> william-fox-pitt-gbr-chilli-morning

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Rider

Moving with the horse „basic seat“

- Pelvis moves in 3 Dimensions and connects with the horse's back
- Tarsus and Knees cushion the movements
- Spine allows movement
- Over shoulders, elbows and wrists -> reins -> horse's mouth

➡ Rider should be relaxed and elastic, free of Dysfunction and Tension

Influence, „Rider's aids“

- legs
- weight
- reins

➡ Coordination, Timing, Tension and Relaxation



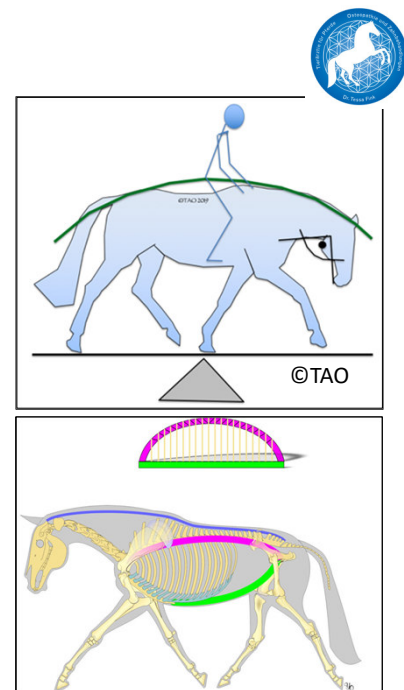
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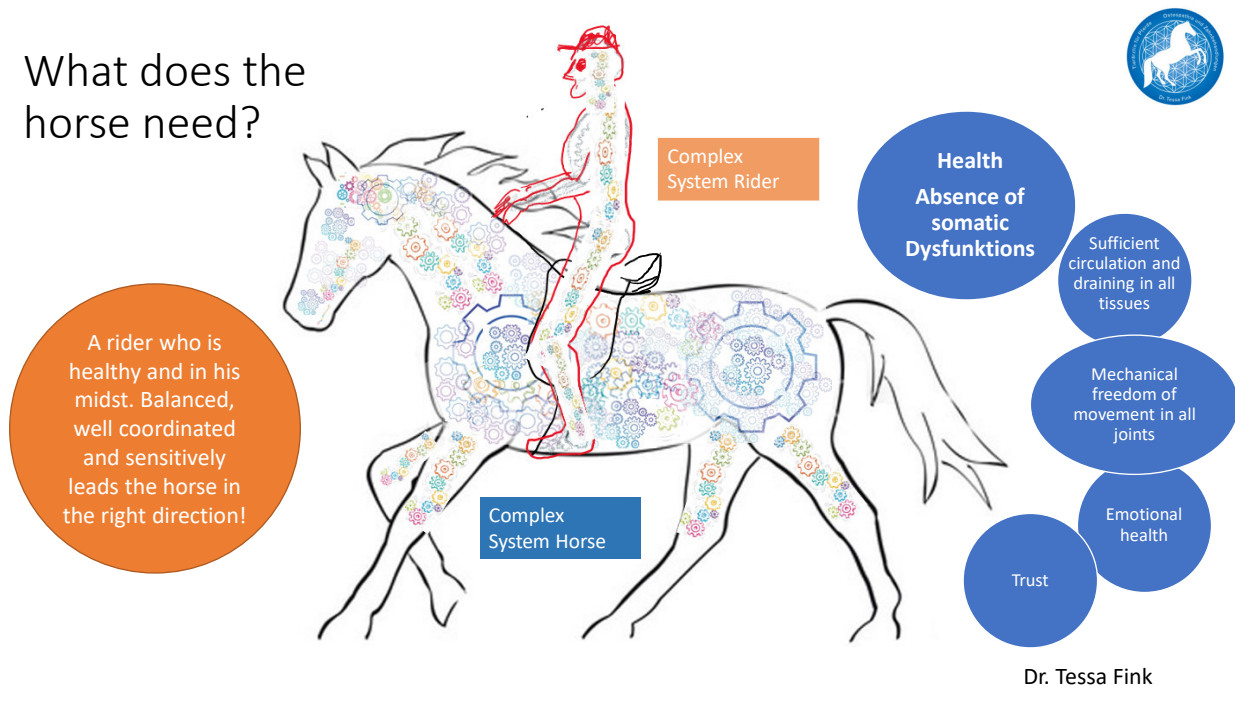
Horse

- Positive body tension
- Slight bulging
- Rhythm, Suppleness, Connection, Impulsion, Straightness, Collection
- Hindquarters activity, back muscles, abdominal muscles, fascia apparatus, M. serratus group, Lig. Spinalis and Lig./Lamina nuchae



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What does the horse need?

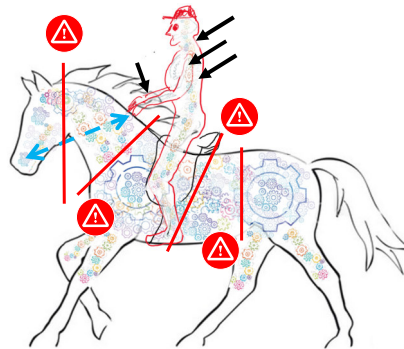


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Dysfunktionen in the rider have consequences....

- DF of Rider in cervical, thoracic, shoulder or wrist -> unsteady, "jumping" reins connection -> DF TMG and OAA of the horse. At the same time, the horse will adopt an avoidance posture, no longer dare to let its movement through the body, and gradually "close" in all diaphragms.



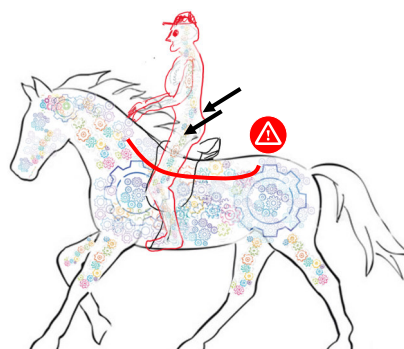
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Dysfunktionen in the rider have consequences....

- DF in lumbar, ilio-sacral joint or pelvis of the rider -> crooked rider, contradictory signals. Horse tries to move under the center of gravity. Swinging of the horse's back is prevented -> DF thoracic, lumbar and thoracolumbal diaphragm of the horse



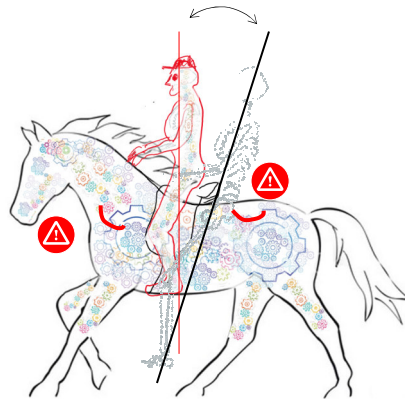
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Dysfunktionen in the rider have consequences....

- Rider sits behind the vertical and at the same time wants to straighten up his horse -> DF of cervico-thoracal junction and lumbo-sacral junction in extension. this is manifested by the weight of the rider and by the dynamics of the horse.



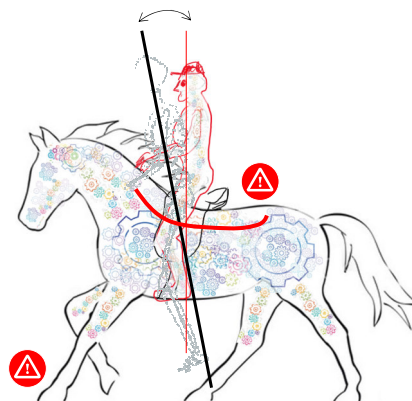
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Dysfunktionen in the rider have consequences....

- Rider sits in front of the vertical (e.g., by round back) -> Horse runs "into the ground", does not arch properly on -> Degenerative diseases of the forelimb and wearer fatigue



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Sometimes it is time for an appointment for the rider.

The osteopathic treatment of
the rider
is applied animal welfare!

- The horse is always the victim when the rider is "not in his midst".
- We can advice the rider and help the horse with veterinary osteopathy...

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Trageermüdung - Carrier fatigue

- Syndrom
- Rider weight but also weight of the Viscera can no longer be carried
- Attention! No recognized medical symptom, can have many different causes. Bad saddle, Bad training, Bad posture
- ... but also low-grade Lameness especially of the hindlegs



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Trageermüdung - Carrier fatigue

- Sagging thorax
- Horse looks overbuilt
- Axe thrust
- Thorax lowered
- LWS with "Hunters Bump"
- No bulging
- Sternum too cranial
- Elbows tight to body
- Front limbs backward
- Hind limbs protruding
- Too strong: lower neck muscles, possibly. Trouser muscles
- Too weak: trunk carrier, upper neck, back and croup muscles
- Tense: shoulder, chest and abdominal muscles



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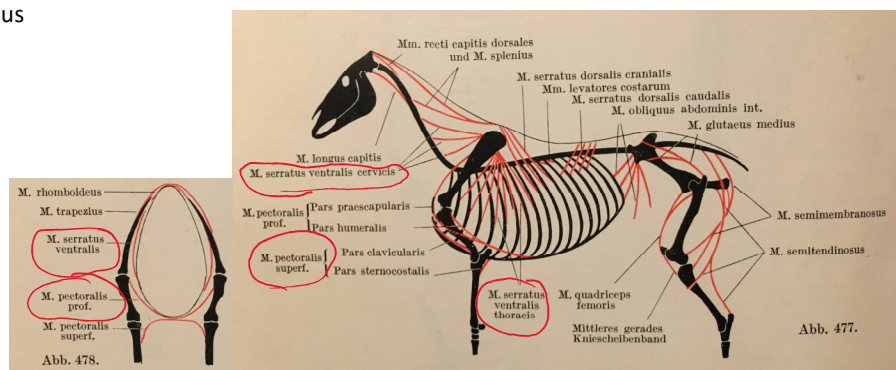
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Thorax carrier - thoracic sling

Shock absorber

- M. Pectoralis profundus
- M. Serratus ventralis



Aus: W. Ellenberger und H. Baum „Vergleichende Anatomie der Haussäugetiere, 17 Auflage 1932

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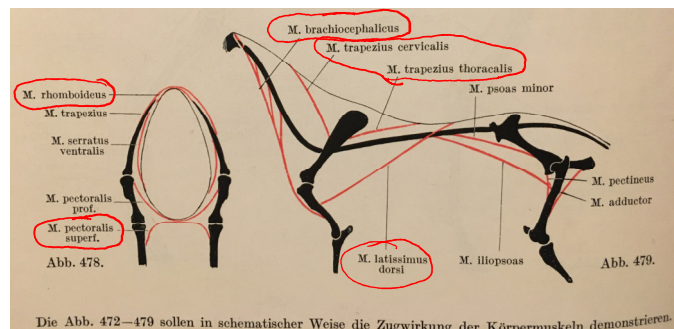
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Limb carriers

Lift and move limb

- M. Latissimus dorsi
- M. rhomboideus
- M. pectoralis superficialis
- M. trapezius
- M. brachiocephalicus



Aus: W. Ellenberger und H. Baum „Vergleichende Anatomie der Haussäugetiere, 17 Auflage 1932

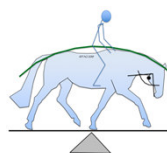
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Fryett and the ridden horse

- What we want is: Flexion! (not hyperflexion of the neck! But appropriate flexion in the lower neck, withers and thoracic spine)
- No bending without bulging!
- more physiologic flexion improves bending



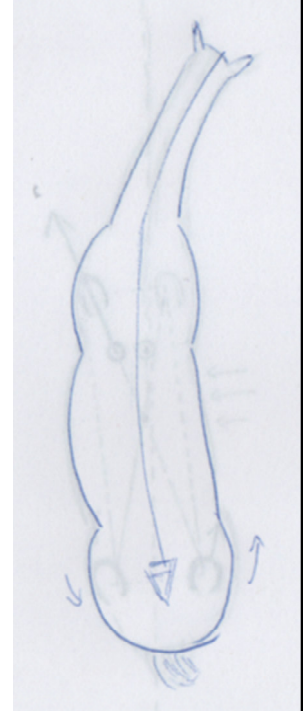
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Laterality

Horses often block in the direction of their Laterality.
Of course, severe traumas can create a dysfunction in the opposite direction.

Laterality right-hollow, left-firm:

- Croup to the right,
- Right hind leg reaches further forward, left hind leg remains steeper, ileum to dorsal
- Left Shoulder "dominant", shoulder to left
- Neck to the right (if rider has not pulled to the left)



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Typical Dysfunktionen in direction of laterality



C0-C1 E o. FSreRli

LF coffin joint, fetlock joint, Sesamoids or Carpus

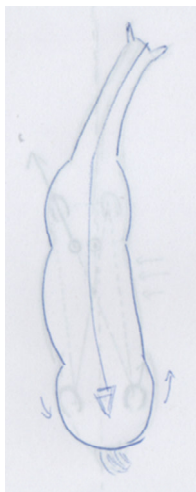
Thoracic and Lumbal spine one or more in E or F RSli

Stomach

Ileum left dorsal

LH Fetlock, Sesamoids, Tarsus

Sakrum Torsion around the right axis (RL) oder RR



SSB, Falx cerebri, Tentorium cerebelli

C2-C5 ?

C6-C7 or C7-Th1 ERSre

Cervico-thoracic Junction

RF Shoulder flex

Liver

Diaphragm

L6 ERSre

Caecum

HR Stifle

And/or Ileum right ventral

Craniale strains

Cervical

Thoracic and Lumbal

Viscera

Limbs

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Work against the tendencies



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Osteopathy in sports medicine

- Every ridden horses is an athlete
- Basically, athletes are just patients
- Especially athletes are masters of compensation
- If a malfunction is not remedied, decompensation occurs, an additional load on certain structures by sparing another
- Exercise damage with symptoms in regions other than the original dysfunction
- Communication and teamwork

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Osteopathy in sports medicine

1. Prevention:

- Inhibition of pathological and
- Initiation of physiological movement patterns (in riding theory: desired posture enabled)

2. Diagnostics:

- Finding the somatic Dysfunction

3. Therapy:

- Elimination the somatic Dysfunction

4. Rehabilitation:

- Restoration of the function (structure-function principle)

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Examination

- Adspection Standing
- Movement Straight Line walk and trot
- Movement Luning (Rhythm, Suppleness, Impulsion, handedness/ crookedness, areas of restricted movement, Lameness?)
- Palpation Heat, Cold, Pain, Density
- Global Listening from tail „Strain of the Day“, SSB, C2 Listening, Diaphragms
- Lokal exams, suspension tests, PAM, Resilience, Ondulation, Rotations, etc.
- Local Listening, for example on the leg: Strain up or down?



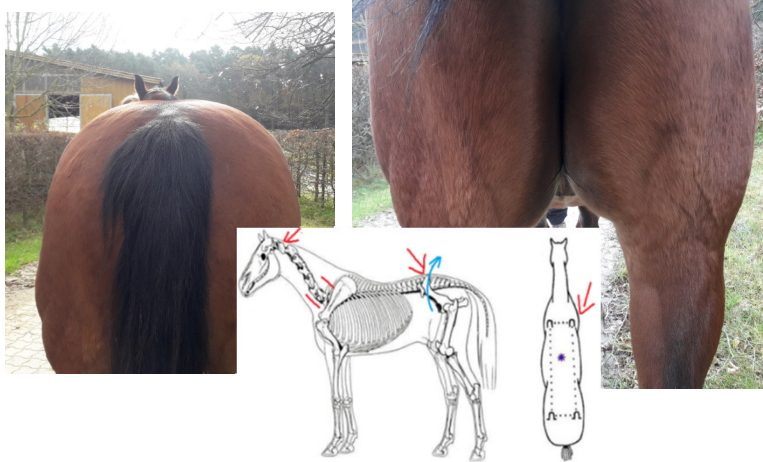
Game Changer!

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Untersuchungsgang Pferd

Jules, 9j QH, Galopp-Problem



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Techniques often used



- Cranio: skull, sacrum
- Giniaux and Structural Techniques (indirekt- direkt): TMG, spine
- Structural Pallandre: Limbs
- Atlas release, Counterstrain myotensiv
- MFR: Muscles, Fascia thoracolumbalis, diaphragms
- Muscle energy techniques: Ileum Symphysis
- Visceral: Stomach, Liver, Kidneys...
- Rektal mobilisation: Ovary
- BLT: joints in limbs, ribs, vertebrae, bones ...
- FPR and Still Technique: Limbs, Sacrum, caudal vertebrae
- Muscle energy techniques: Ileum Symphysis
- Fluid-8-Technique: Scars, Bones
- Often numerous techniques are used in one region to adress different anatomical structures.
- Focus on Diaphragms:

OAA, cervico-thoracic,
thoraco-lumbal and
lumbosacral transitions

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Treatment Examples Horse

Cranio



Counterstrain



Atlas release



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Sesamoids, Carpus, Shoulder



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Mobilisation Scapula, thorax and limb carrier muscles



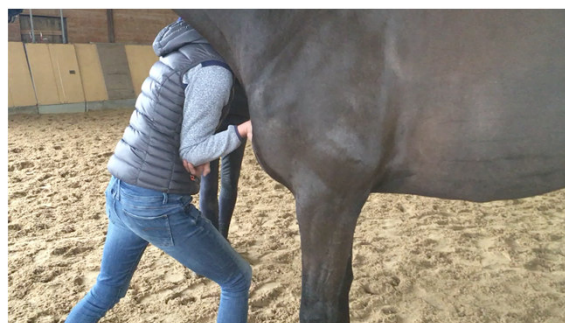
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Sternum

- Treatment and Mobilisation improves overall success
- Ventral myofascial Line SVL
- Structural Osteopathy and/or
- active Mobilisation possible
- ...also a lymphatic Technique!



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Hip, Stifle, ISJ, Sakrum



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Stifle BLT



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Stifle (BLT, FPR or myofascial)

Balancing the joint with the foot
- giving compression



Flexible Treatment positions



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Tx Symphysis (Muscle energy technique)



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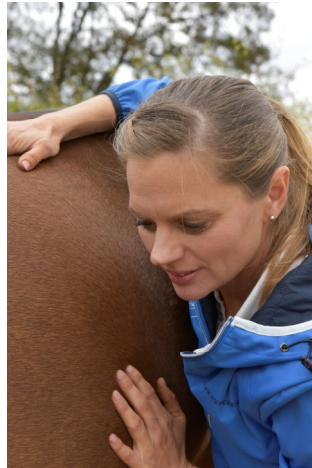
Visceral Osteopathy



Liver (Motility)



Stomach



Cutaneous Muscle and Fascia transversalis of a newborn foal



„mental
Projection“

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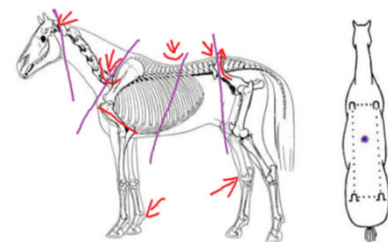
Examination and Treatment Videos:



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praxis@fieract-osteodental.de



Osteopathische Untersuchung



Pferd: Hazel
Besitzer: Feld 7, Feld 6
Datum: 8.4.2021

Vorbericht: 6 j WB Stute, viele fehlerfreie Parcours und gute Platzierungen
ägstlich am Putzplatz, aufhängen am Anbindestrick, neulich beim Springen gestürzt (K
sion HWS).

Wichtigste Befunde: C6-C7 ERSre
C0-C1 ERS re
Th17-18 ERSli
L5-L6 ERSli
Ileum li dorsal
Cubod li re
Gleichben vorne re lateral
Sternum
DAA.CTIL.TI.II.SQ

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Fazit



- Horseback-Riding can be a wonderful sport
- In order for it to be pleasant and health-promoting for everyone involved, physical requirements must be met, among other things. For this purpose, human and veterinary osteopathy are important wheels in the system
- Thank you for your time and attention!
- For Questions and remarks: praxis@tierarzt-osteo-dental.de
- Seminar **“Reiten bis der Tierarzt kommt”** at **TAO July 8th-10th 2022**
- All Pictures and Videos © Tessa Fink unless otherwise specified.

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