

FACULTY OF VETERINARY MEDICINE
DEPARTMENT OF SURGERY AND ANAESTHESIOLOGY OF DOMESTIC ANIMALS

VALKUILEN IN HET KREUPELHEIDSONDERZOEK: BEPERKINGEN VAN VISUELE BEOORDELING, EN MISLEIDENDE COMPENSATIEMECHANISMEN

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– Quiz

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VISUELE BEOORDELING KREUPELHEID

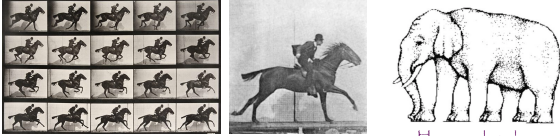
The image contains three parts: 1) A close-up of a horse's eye. 2) A diagram titled 'Lame Trotting' showing four horses in a trotting sequence. The first horse has its head raised, and the second has its head lowered. A dashed line indicates the head's vertical position. 3) A line graph titled 'Vertical displacement (m)' vs 'Percentage Stride'. The y-axis ranges from -0.1 to 0.05. The x-axis ranges from 0 to 100. Three shaded regions are labeled: RF (Right Forelimb) from 0-20%, LF (Left Forelimb) from 40-60%, and RE (Right Hindlimb) from 80-100%. The graph shows two curves: a black curve and an orange curve, both exhibiting a sinusoidal-like wave pattern.

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PROBLEMEN VISUELE BEOORDELING

- ‘Perceptie’ van kreupelheid (Parkes et al, 2009)

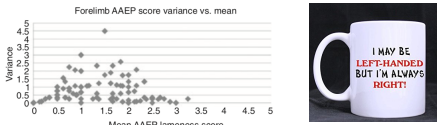


How many legs does this elephant have?


- ‘Concept’ van kreupelheid

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- Variabiliteit tussen waarnemers (Keegan et al, 1998, 2010)
- Ervaring?



- Keuze gradatiesysteem (Hewetson et al, 2006)
- ‘Bias’ na lokale anesthesie (Arkell et al, 2006)

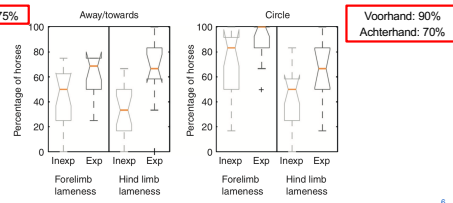


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Veterinary Record **Veterinary student competence in equine lameness recognition and assessment: a mixed methods study**
 Sandra D Starke and Stephen A May
 Veterinary Record 2017 181: 168

20 studenten
 34 filmpjes
 Kreupelheid +/- 3/10

70-75%



Voorhand: 90%
 Achterhand: 70%

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– Leereffect

– Foute beoordeling

- Links-rechts: conceptueel
- Voor-achter: perceptie (interactie/compensatie)
- Correct identificeren 'normaal paard'
- spectrum van 'correcte' beweging

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METHODEN

– Voorhand

- 'Lagere hoofdpositie op gezonde lidmaat' ('impact')
- Uitzondering: extreme 'push-off' kreupelheid

Vertical displacement (m)

Percentage Stride

NORMAL HORSE
RF IMPACT LAMENESS
RF PUSHOFF LAMENESS

MAXDIFF = A - B = 0
MINDIFF = C - D = 0

MAXDIFF = A - B = +
MINDIFF = C - D = +

MAXDIFF = A - B = -
MINDIFF = C - D = -

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– Achterhand

- Totale bewegingsamplitude tuber coxae (li vs re)
 - ↑ aan zijde kreupelheid
 - Conformatie!
- Verticale verplaatsing sacrum
 - Min en Max positie
 - Kleinere amplitude dan TC

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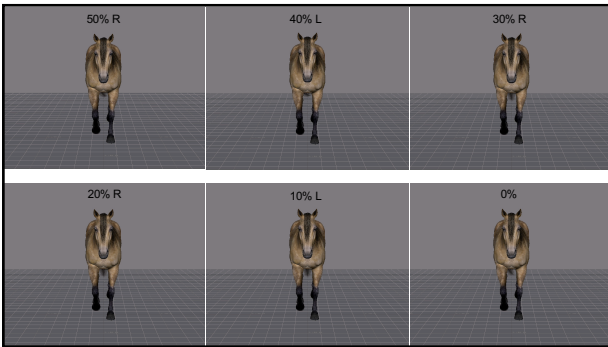
WWW.LAMENESSTRAINER.COM

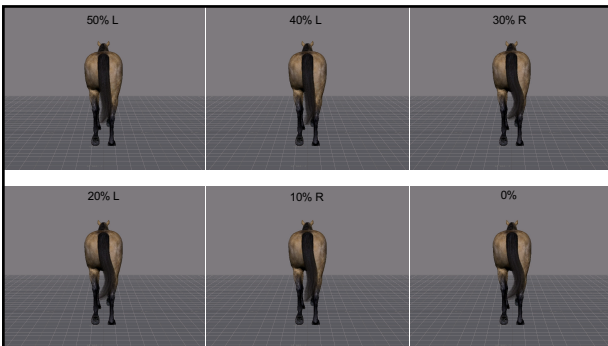
Lameness Trainer

Welcome to your free, interactive training in lameness detection.

Copyright © 2014 Sandra Starke, Gregory Miles, Stephen May

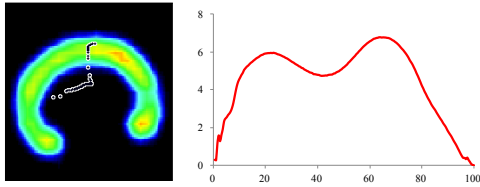
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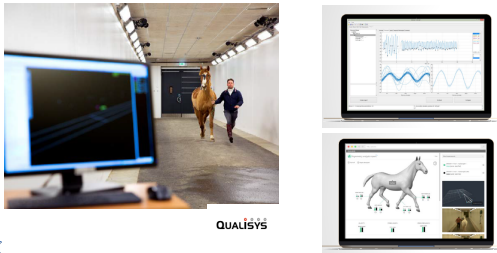
OBJECTIEVE EVALUATIEMETHODES

– Krachtplaat en drukplaat (e.g. RSScan International)



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– Camera-gebaseerde systemen (e.g. Qualisys QHorse)



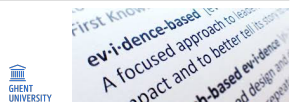
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– Inertial sensors



'OWNER-SOUND'

- >70% van 'normale' sportpaarden: significante asymmetrie in beweging / kreupelheid



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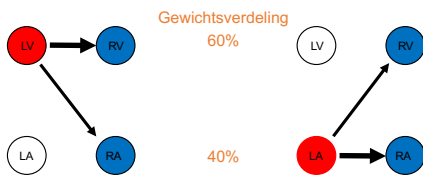
"MULTI-LIMB LAMENESS"

- 'Compensatoire kreupelheid'
- Multipelen problemen
 - Primair
 - Secundair



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REDISTRIBUTIE KRACHTEN



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'LAW OF SIDES'

– Ipsilateraal : start achteraan **TRUE**
– Contralateraal: start vooraan **1/2 TRUE**

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CASUS

– Quarter merrie, 13 j.

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Lage anesthesie LIA



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TAKE HOME MESSAGE

- Compensatoire kreupelheid voorhand ten gevolge van kreupelheid achterhand (ipsilateraal) **WATCH OUT!**
- (Compensatoire kreupelheid achterhand ten gevolge van kreupelheid voorhand)
 - Ipsilateraal impact (soms)
 - Contralateraal push-off (vaker)
- Meten is weten




The screenshot shows a webpage from 'The Veterinary Journal' with the title 'Recognition of lameness: Man versus machine' by Sue Dyson. It includes a 'Full Text' button and a 'Download PDF' button.

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Dank aan:
Michèle Dumoulin
Sandra Starke
Kevin Keegan



www.lamenesstrainer.com
