An investigation of the relationship between hindlimb lameness and saddle slip

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BACKGROUND

We have observed saddle slip consistently to one side in some horses. Reasons include a crooked rider, an ill-fitting saddle, asymmetry in back shape and lameness. Currently, there are no objective data assessing the relative importance of each factor.

OBJECTIVES

The objectives were to document the frequency of occurrence of saddle slip in horses with hindlimb lameness compared with other horses and to describe the effect of lameness characteristics and grade, the abolition of lameness by diagnostic analgesia, breed, type, size, thoracolumbar shape and symmetry and the rider's weight.

HYPOTHESES

SADDLE SLIP may be induced by HINDLIMB LAMENESS, with the saddle slipping most frequently to the side of the lame or lamer limb

The degree of SADDLE SLIP may be reduced by improvement in the lameness by diagnostic analgesia

METHODS

One hundred and twenty-eight horses were assessed prospectively and lameness grade and degree of saddle slip before and after diagnostic analgesia were recorded.

The lameness was graded using a 0 - 8 scale

GRADE 0 Sound
GRADE 2 Mild lameness
GRADE 4 Moderate lameness
GRADE 6 Severe lameness
GRADE 8 Nonweightbearing lameness

All horses were ridden by at least two riders

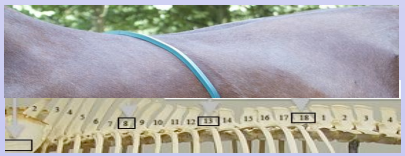
IN A STRAIGHT LINE

ON A CIRCLE

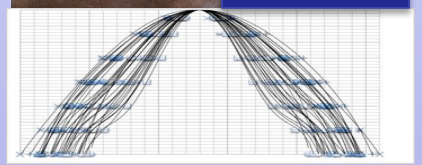
DEFINITIONS OF SADDLE SLIP

GRADE 0 No saddle slip at any gaits
GRADE 1 Saddle slip at the trot and/or canter on one or both reins
GRADE 2 Obvious saddle slip at the trot and canter on one or both reins, such that the rider intermittently had to stop the horse and straighten the saddle

The thoracolumbar shape and symmetry were measured objectively at 4 predetermined sites.



Repeatability of the *measurements was ± 2 mm.*



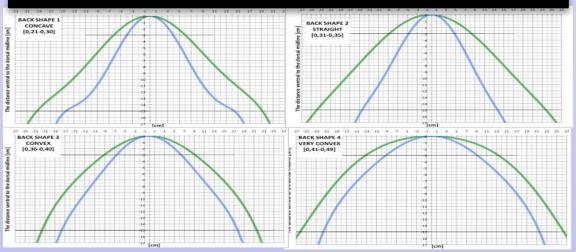
- 11 sound horses *(No saddle slip)*
- 26 with forelimb lameness *(1 with saddle slip)*
- 20 with sacroiliac joint region pain and/or back pain *(No saddle slip)*
- 71 with hindlimb (HL) lameness *(38 with saddle slip)*
  - –20 horses had unilateral HL lameness
  - –51 horses had bilateral HL lameness

BEFORE diagnostic analgesia

AFTER diagnostic analgesia

Diagnostic analgesia abolishing the hindlimb lameness eliminated the saddle slip in 97% of the horses. In two horses the saddle continued to slip after resolution of lameness. The saddle of both horses was asymmetrically flocked. Both horses were also ridden with correctly fitting saddles and no saddle slip was apparent.

FOUR CATEGORIES OF BACK SHAPE



SADDLE SLIP INDUCED BY HINDLIMB LAMENESS ➔ Consistently greatest with a lighter-weight rider

SADDLE SLIP RELATED TO AN ASYMMETRICAL SADDLE ➔ Greater with a heavier- weight rider

CONCLUSIONS

Hindlimb lameness is an important factor in inducing saddle slip. Saddle slip may be an indicator of the presence of hindlimb lameness.

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