



The equine pain face

Gleerup, Karina Charlotte Bech; Forkman, Björn; Lindegaard, Casper; Andersen, Pia Haubro

Publication date:
2014

Document version
Early version, also known as pre-print

Citation for published version (APA):
Gleerup, K. C. B., Forkman, B., Lindegaard, C., & Andersen, P. H. (2014). *The equine pain face*. Poster session presented at Congress for the International Society for Applied Ethology, Vitoria-Gasteiz, Spain.

The equine pain face



Karina B. Glerup¹, Björn Forkman¹, Casper Lindegaard², Pia H. Andersen³

¹University of Copenhagen

²Evidensia Equine Hospital Helsingborg, Sweden,

³Swedish University of Agricultural Sciences, Sweden.

Corresponding author: kbg@sund.ku.dk

BACKGROUND

In many animals moderate pain induces only minor changes in their behaviour. Recent research has shown that facial expressions may be a sensitive indicator of pain in some species.

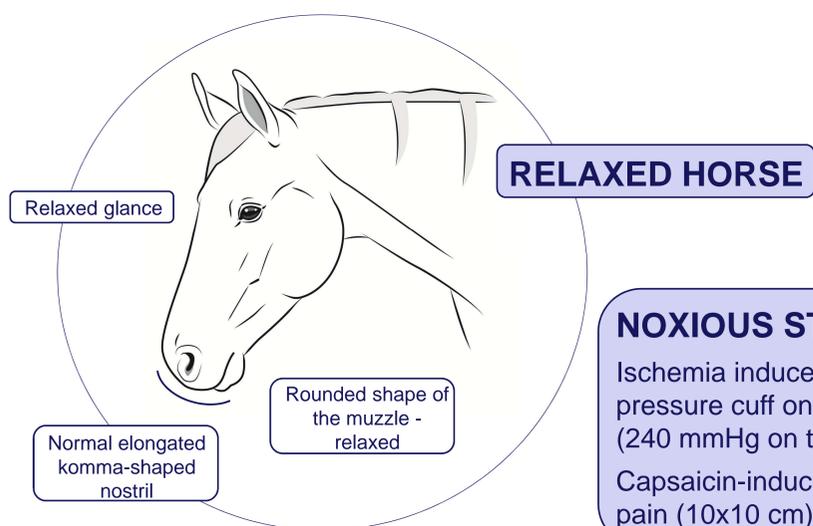
OBJECTIVE

The aim of this study was to investigate the possible existence of an equine pain face and to describe this in detail.

METHODS

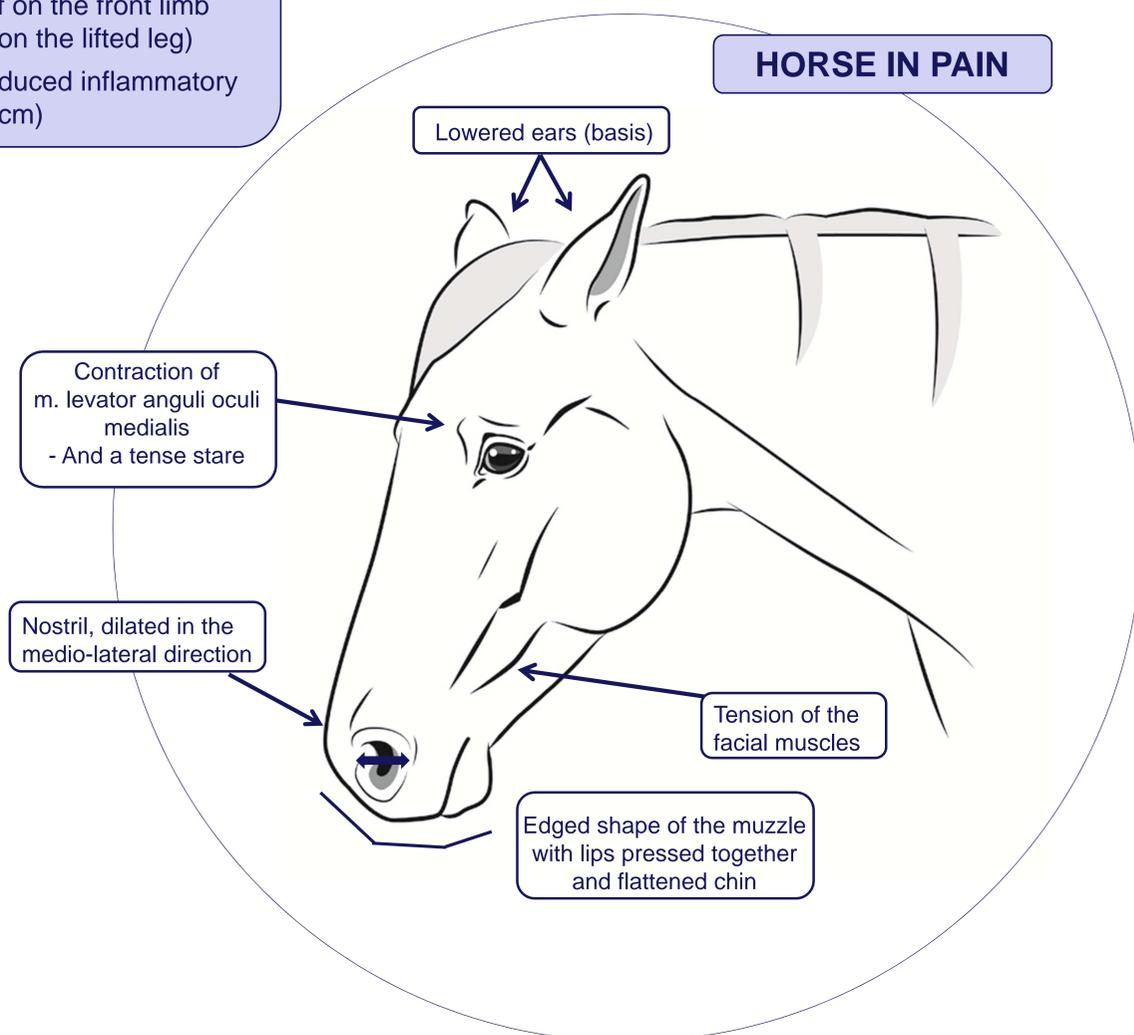
Six horses were included in the study. They were subjected to two pain modalities twice – with and without an observer present.

The horses wore a neck collar and were placed in a narrow space to reduce movement.



NOXIOUS STIMULATION

Ischemia induced by a blood pressure cuff on the front limb (240 mmHg on the lifted leg)
Capsaicin-induced inflammatory pain (10x10 cm)



HORSES IN BASELINE RECORDINGS



HORSES IN PAIN

RESULTS

Both methods produced altered behaviour interpreted as pain, in all horses. Alterations in facial expressions were observed in all horses and facial expressions representative for baseline and pain expressions were condensed into explanatory illustrations (see below).

CONCLUSION

An equine pain face can be recognized in horses during induced moderate pain and may be a useful tool for recognizing pain in horses and thereby improving animal welfare.