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The equine pain face



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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.

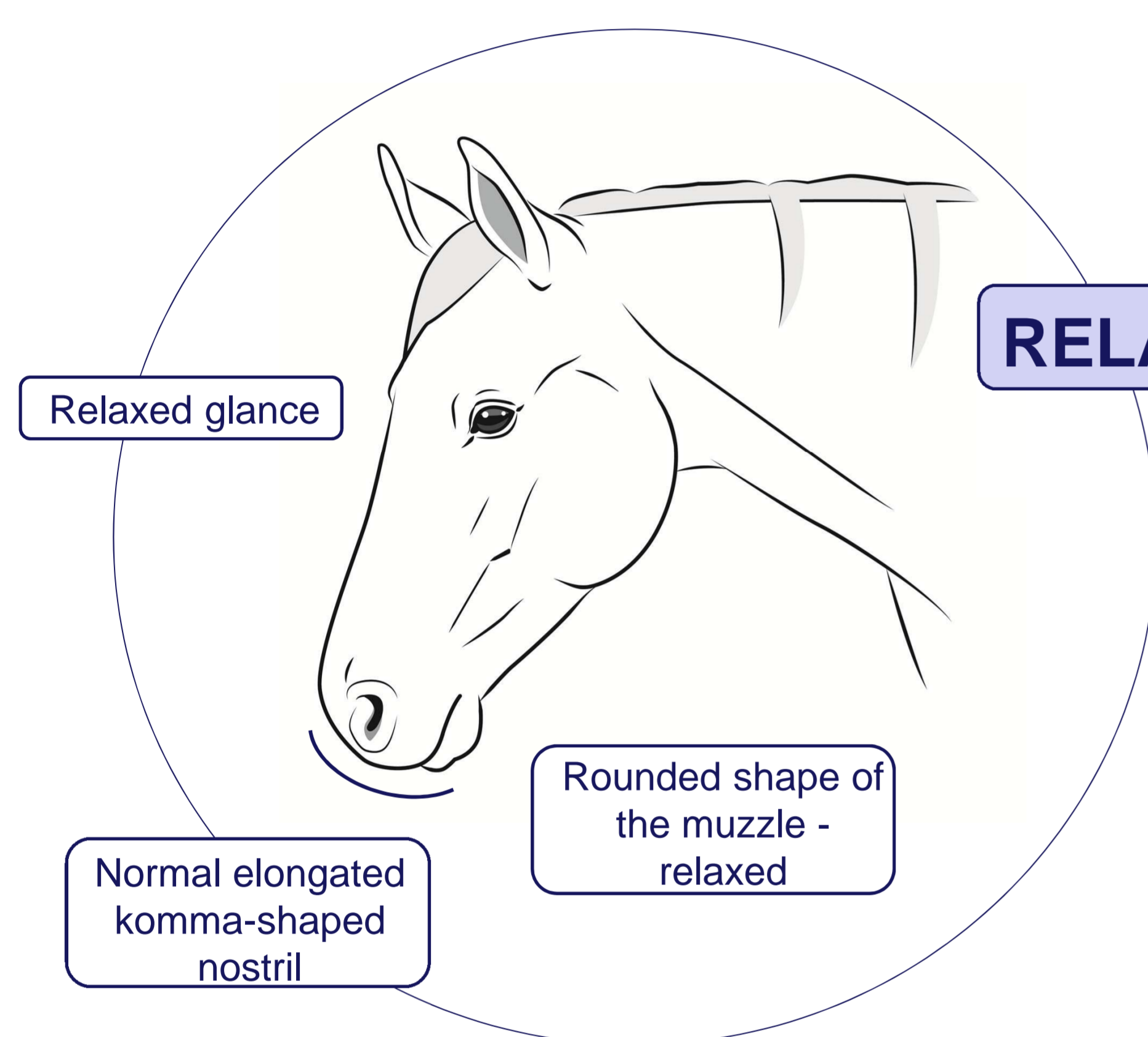
OBJECTIVE

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.

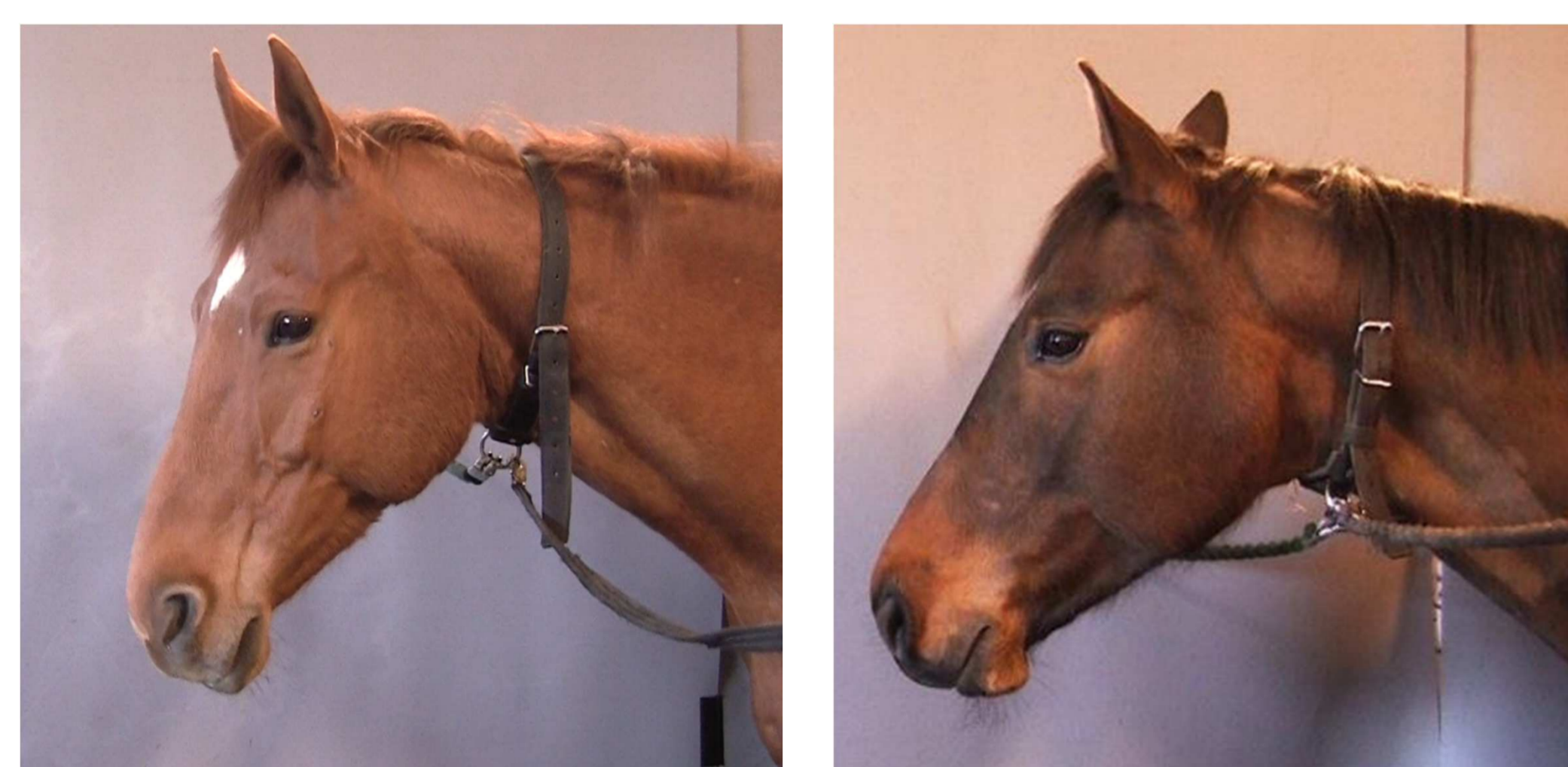


RELAXED HORSE

NOXIOUS STIMULATION

Ischemia induced by a blood pressure cuff on the front limb (240 mmHg on the lifted leg)

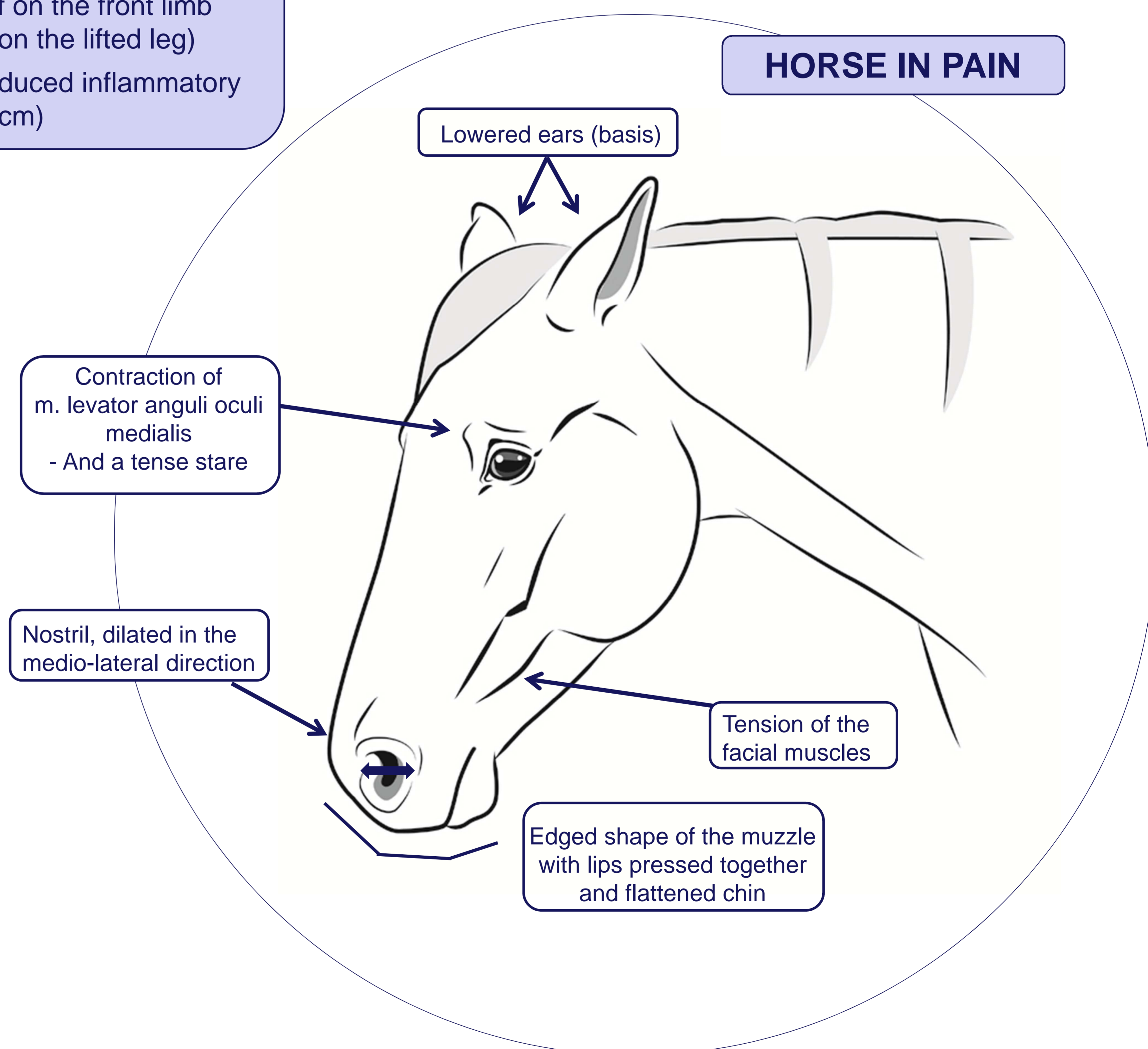
Capsaicin-induced inflammatory pain (10x10 cm)



HORSES IN BASELINE RECORDINGS



HORSES IN PAIN



HORSE 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.