

EFFECTIVENESS OF ELECTROACUPUNCTURE IN THE TREATMENT OF PAIN; A PILOT STUDY ON SEVEN HORSES USING PRESSURE ALGOMETRY

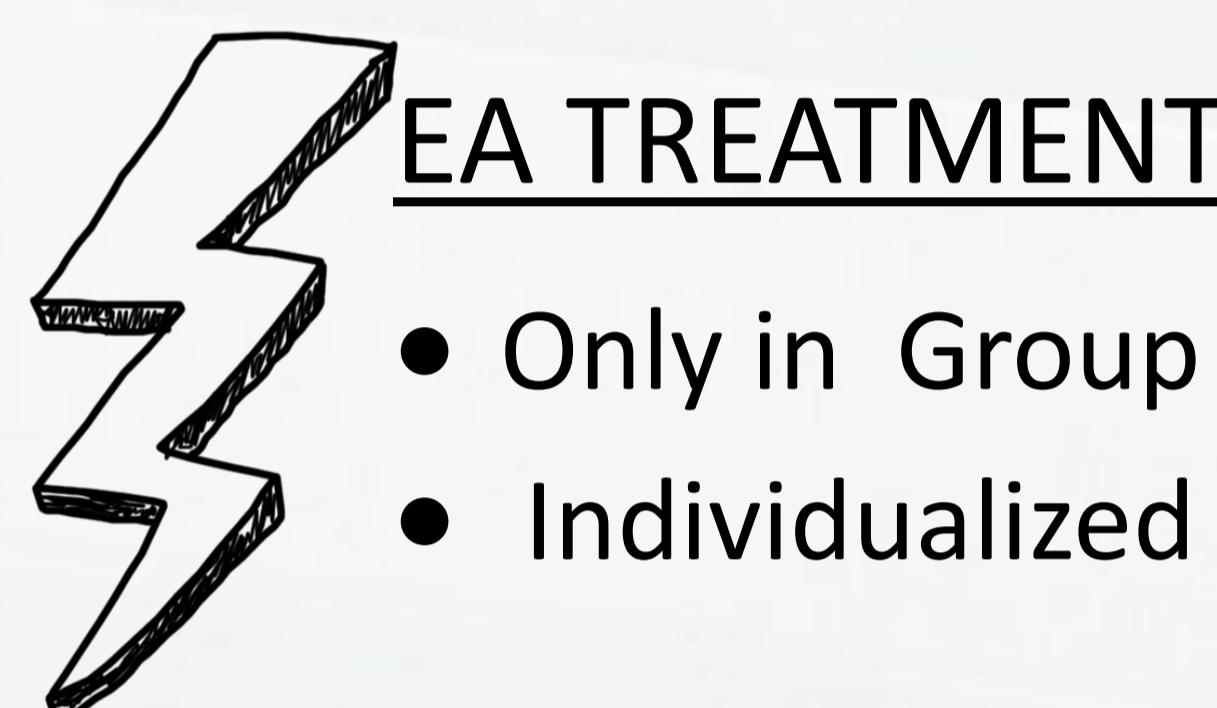
INTRODUCTION AND OBJECTIVE

Acupuncture therapy has been known as a practice associated with Oriental Medicine, and it has recently been identified in the field of Complementary and Alternative Medicine as a potential therapeutic procedure for its pain relief.

Electroacupuncture (EA) is a method in which an electric current is passed to the animal through a needle inserted in an acupoint. It has been found to produce a strong **analgesic effect**.

The aim of the pilot study is to determine the effectiveness of EA treatment by objectively evaluating pain threshold, using pressure algometry, in seven horses with different diseases and comparing with other horses with the same disease but not receiving EA treatment.

MATERIALS AND METHODS



EA TREATMENT:

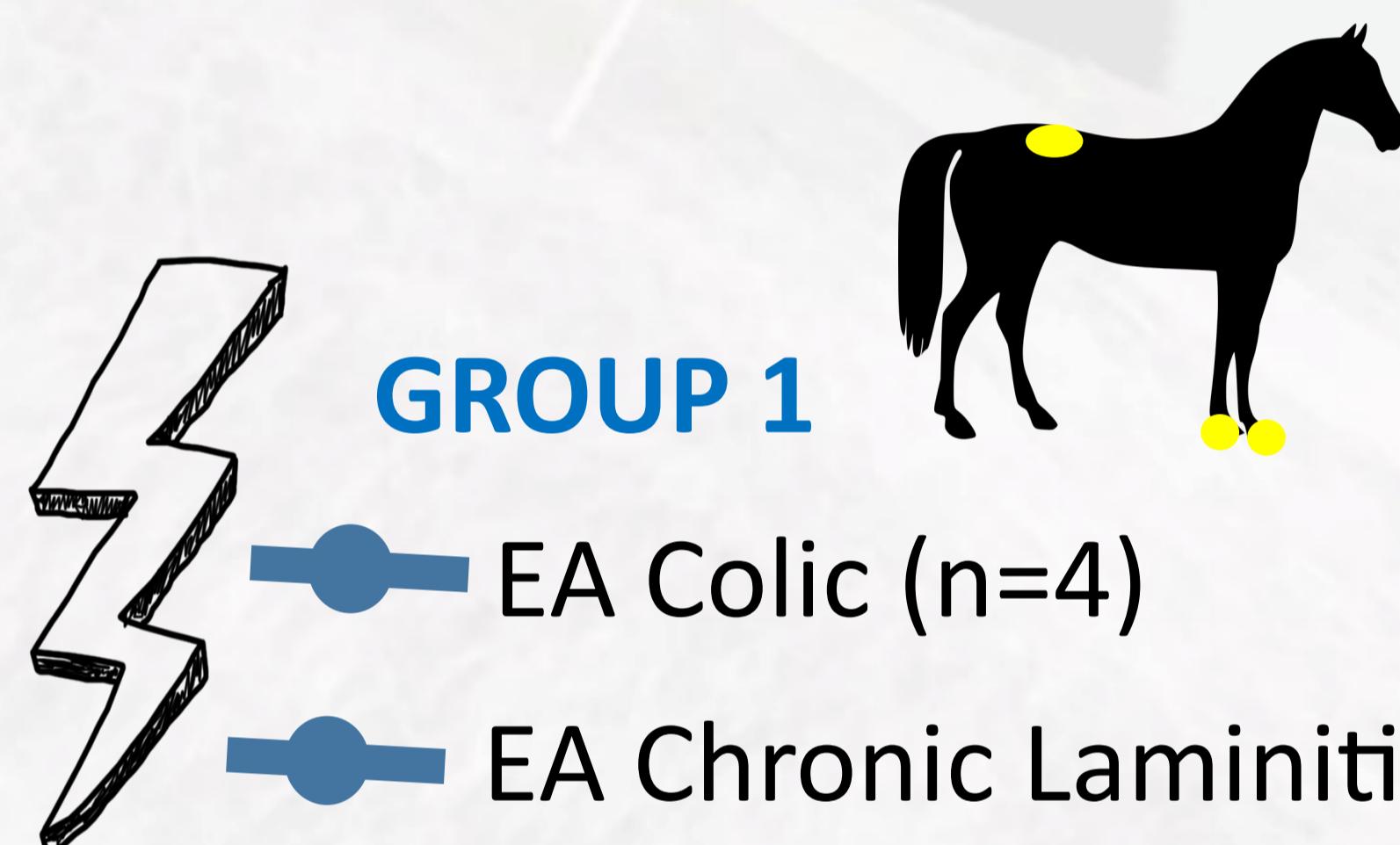
- Only in Group 1
- Individualized EA treatment



PRESSURE ALGOMETRY

- Chronic laminitis → **Coronary band (both forelimbs)**
- Colic → **L6**

ANIMALS AND GROUPS



RESULTS

CHRONIC LAMINITIS

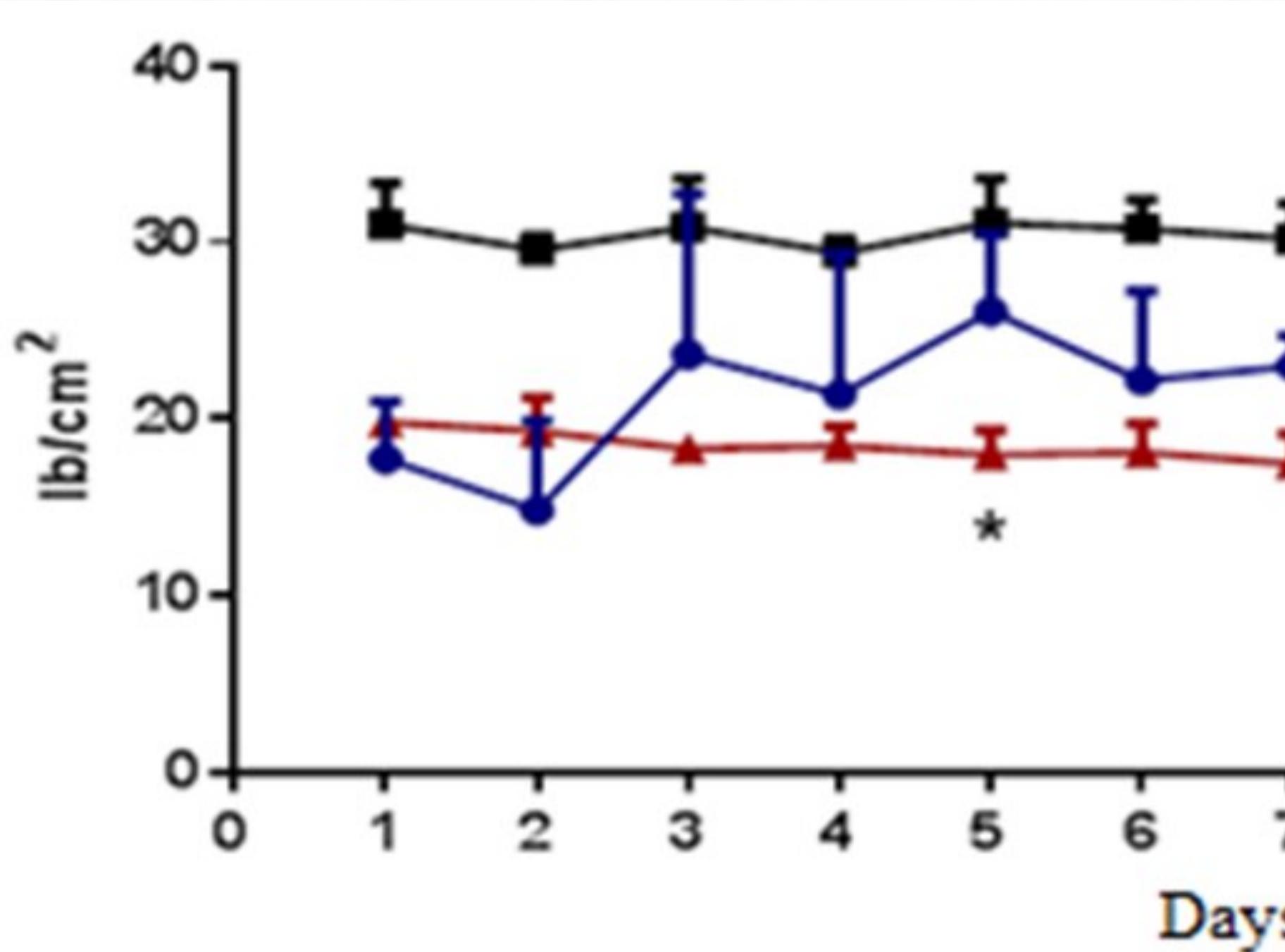


Figure 1. Pressure algometry means ± SEM in the right forelimb coronary band.

*Statistically differences between Group 1 and Group 2 ($P<0.05$)

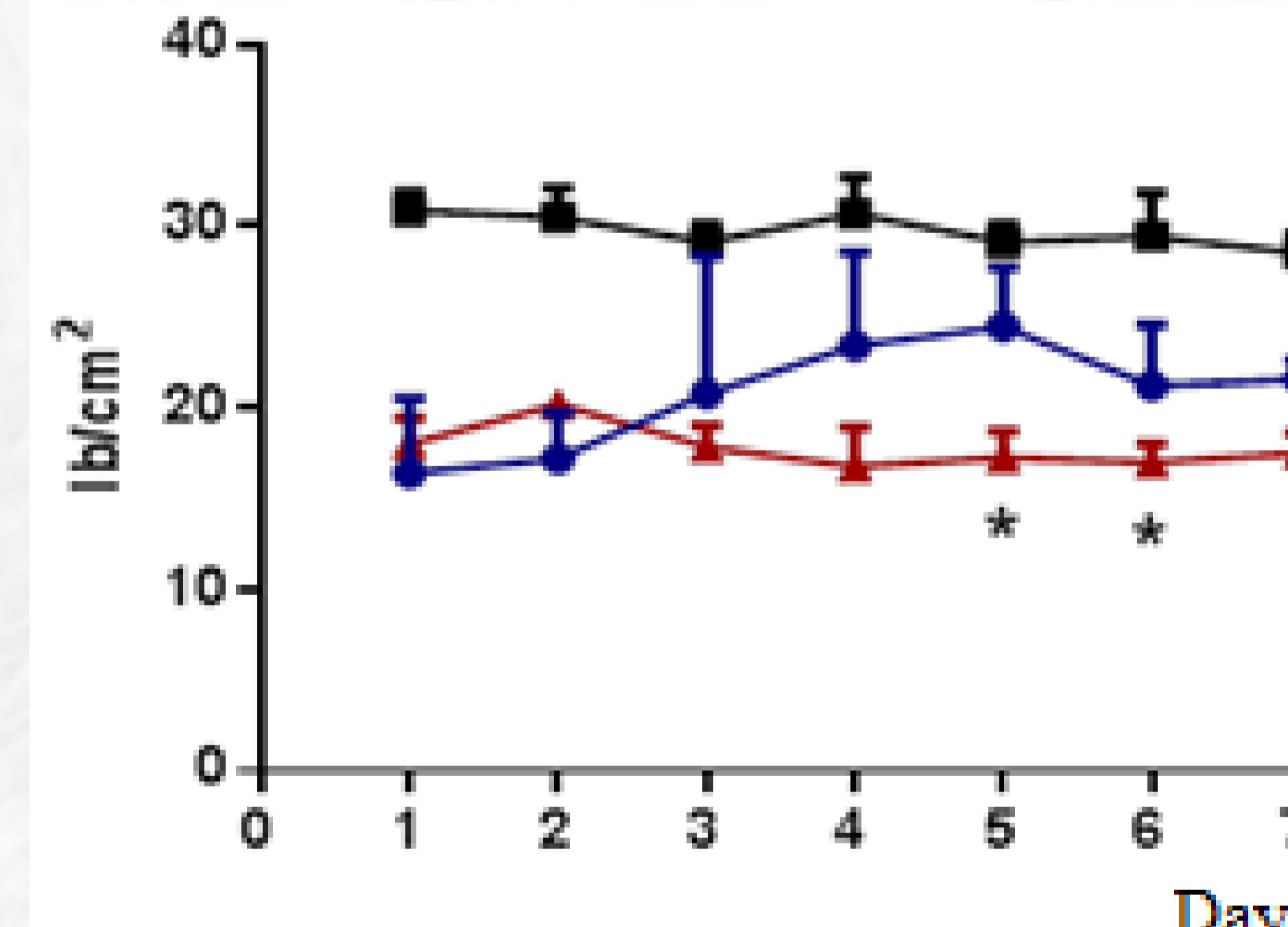


Figure 2. Pressure algometry means ± SEM in the left forelimb coronary band.

*Statistically differences between Group 1 and Group 2 ($P<0.05$)

COLIC

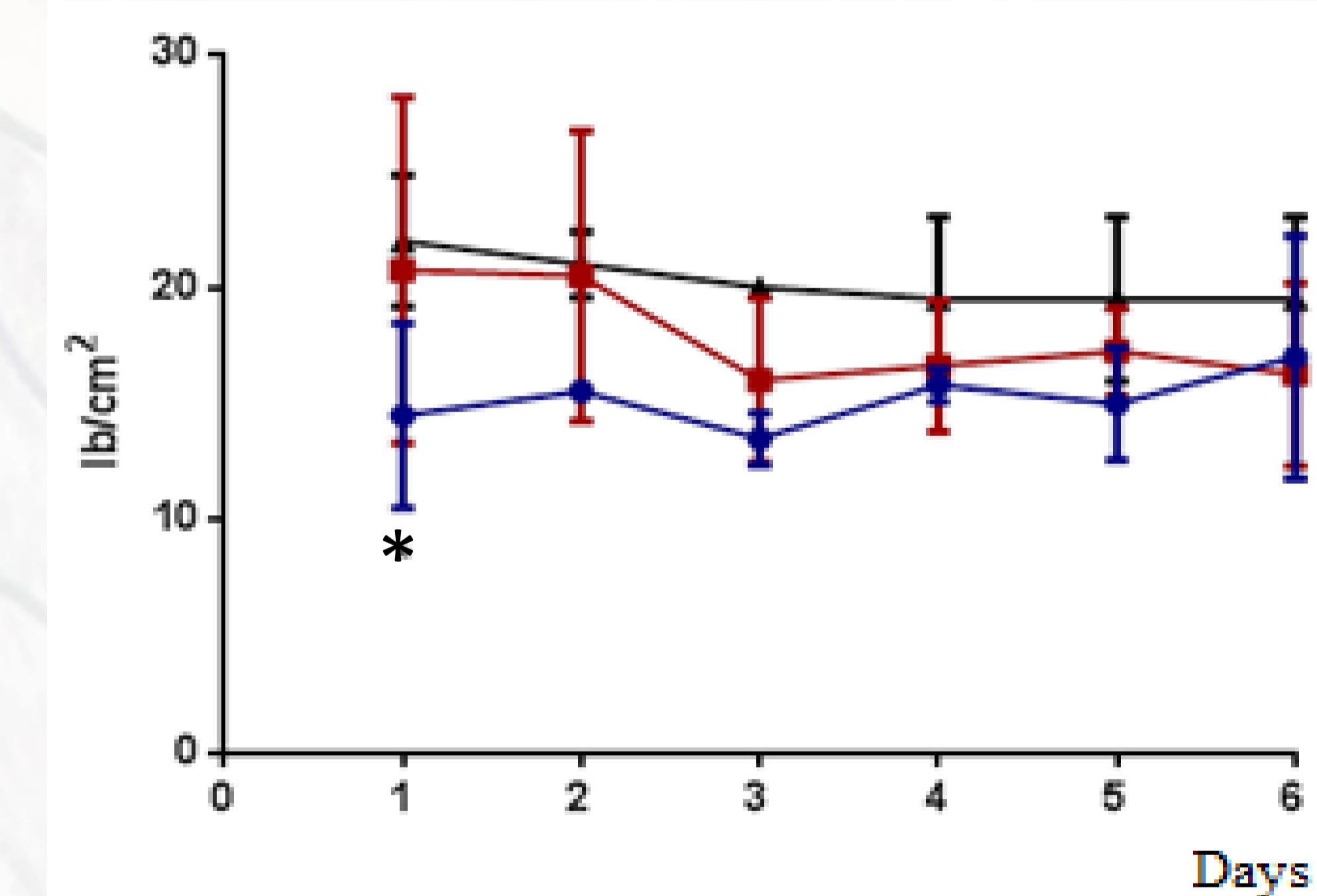


Figure 3. Pressure algometry means ± SEM in the lumbar vertebra L6.

*Statistically differences between Group 1 and Group 2 ($P<0.05$)

CONCLUSIONS

- The results of the study suggest that EA treatment significantly reduces the level of pain in horses with chronic laminitis.
- It can not be determined whether EA treatment has an effective analgesic effect on acute visceral pain (colic).
- Further studies are needed in order to ensure greater reliability of the results taking the following points into account:
 - Higher population (n) and adjust the treatment duration.
 - Suppress the pharmacological treatments before and during all the EA treatment.
 - Establish an identical EA protocol :acupoints, frequency and number of sessions.
 - Define a control group for every pathology without EA treatment, under the same conditions mentioned.