

nor the mechanical threshold was affected by successive stimulations (517 ± 126 , 413 ± 84 , 598 ± 97 and 499 ± 122 g, for first to fourth stimulation, respectively) or differed between right and left leg (522 ± 86 g vs. 492 ± 64 g, respectively). No correlations between mechanical thresholds and behavioural responses were found.

Conclusion: The results show that pigs respond behaviourally to mechanical von Frey stimulation directed at the hind legs, and suggest that responses were not affected by successive stimulations.

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A human experimental bone pain model

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Introduction: Bone associated pain from, e.g., metastases is poorly understood. The aim of the study was to develop a human experimental model, which could evoke pain from the periosteum.

Method: Fourteen healthy males (mean age 25 years, range 21–34) were included. Each subject participated in two sessions where pressure pain thresholds (PPT) were estimated with different probe

sizes. A computer controlled algometer was applied to the skin over right medial tibia and a handheld algometer over the left medial tibia. Stimulation was performed before and after local anaesthesia (LA) to estimate influence of skin. In addition test-retest variation was evaluated.

Results: For both algometers there was no major difference within subjects ($ICC > 0.6$) or between subjects ($CV < 13\%$). Computer controlled algometer: For probe size 6 mm there was a significant difference in PPT before and after LA ($P = 0.007$). Probe size 8 mm showed no significant difference before and after LA ($P = 0.19$). No significant differences were seen between sessions for both probe sizes (6 mm: $P = 0.43$; 8 mm: $P = 0.32$). Handheld algometer: No significant differences in PPT for any probe sizes (2, 4, 6, 8 and 10 mm) were seen before and after LA ($P = 0.4$; 0.2; 0.01; 0.08 and 0.5). For probe sizes 2 and 10 mm there were no significant differences between sessions ($P = 0.2$; 0.3). Probe sizes 4, 6 and 8 mm showed significant differences in PPT between sessions ($P = 0.03$; 0.045; 0.006) indicating bias of the method over time.

Conclusion: Both methods could reliably evoke experimental periosteum associated pain. The handheld algometer is in practise easier to use.

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