

LOWER BACK PAIN AND BEHAVIOURAL CHANGES IN CATS: A SHORT TERM FOLLOW UP AFTER ORTHOMANUAL TREATMENT

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Chronic back pain in cats is a common and underestimated problem. Reasons for this discrepancy might be a lack of understanding about the aetiology of spinal disorders in cats, a weak correlation between medical imaging findings, intervertebral disc disease and clinical signs, and the difficulty of pain detection in cats. Chronic pain in cats generally causes gradual changes in behavior and lifestyle rather than profound gait abnormalities. Owner questionnaire-based outcome measures have proven to be reliable in the assessment of chronic pain.

Orthomanual medicine assumes that spinal pain may be caused by a misalignment of consecutive vertebrae. Furthermore, it is theorized that vertebral misalignment causes facet joint subluxation and predisposes to intervertebral disc herniation. Cranioventral angulation or misalignment of the sacrum has been associated with lumbosacral instability and stenosis; the main cause of lower back pain in dogs and presumably in cats. Orthomanual therapy is a manipulative technique designed to correct vertebral misalignments and facet subluxation and has empirically proven to be an effective treatment for lower back pain in cats.

This study describes behavioural and lifestyle changes in 21 cats with lower back pain before and after orthomanual therapy.

Twenty-one cats admitted with the primary owner complaint of behavioural changes indicative of back pain were included in the study. Presence of lower back pain was assessed by elicitation of pain on digital palpation of the lumbosacral region. In all cats, one or more vertebral misalignments in the lumbosacral region were detected clinically by inspection and palpation by an orthomanual veterinarian. These vertebral misalignments were treated with orthomanual therapy. Owners were asked to complete a questionnaire before and 14 days after the treatment. The questionnaire involved an assessment of the degree of behavioural changes observed on a scale from

1 to 10. The relationship between the baseline and 14 days scores were analyzed using a non-parametric Wilcoxon signed rank test with significance set at $P < 0.05$.

The most common owner complaints were reluctance to jump (38%) and signs of pain when touching the cat's lower back (24%). A misalignment of S1 was found and corrected in 16 cats (76%) and of L7 in 6 cats (29%). There was a statistically significant improvement in the owners' overall questionnaire scores from a mean of 5.3 at baseline to 4.2 at 14 days ($P < 0.0001$).

The predominant owner complaints in this feline patient group match those reported in dogs with lumbosacral pain. However, aspecific signs like reduction in general happiness or wellbeing, and behavioural changes such as hiding and avoiding contact with the owner were also common and sometimes the only owner complaint. This is consistent with the established impression that manifestations of chronic pain in cats can be subtle and aspecific, and therefore conditions that cause chronic pain may be easily overlooked.

This may especially apply to conditions causing spinal pain, which often fail to show radiographic abnormalities and fail to respond to treatment with analgesics. Other conditions such as osteoarthritis are known to cause similar symptoms and bias due to comorbidity cannot be ruled out. However, most of the patients in this study had been treated unsuccessfully with analgesics and exercise restriction prior to the orthomanual treatment.

We conclude that orthomanual treatment of cats with lumbosacral pain and vertebral misalignments in the lumbosacral area seems to provide at least short-term pain relief and significant improvement of owner-perceived behavioural and lifestyle changes indicative of chronic pain. Due to the subjective nature of owner questionnaire assessment and the absence of a control group, a placebo effect on the assessment of behaviour cannot be ruled out.