

Initial Development of a Novel Feline Health-related Quality of Life Tool “Xpertise QOALyon” for Osteoarthritis.

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Objectives

Osteoarthritis (OA) is a major cause of chronic pain in cats, leading to alteration of quality of life (QoL)¹. The involvement of the caregivers is fundamental for the associated chronic pain evaluation. Alteration of mobility is not always an obvious sign of the disease in cats, and other dimensions of the associated chronic pain are seldom evaluated by existing assessment tools², therefore we aimed to evaluate a novel QoL tool designed to assess the different dimensions of chronic pain in cats presenting with OA.

Methods

Following a preliminary work with the support of a panel of 14 experts from different areas of expertise (anaesthesiologists, surgeons, rehabilitators and behaviourists), a multidimensional questionnaire dedicated to caregivers was developed to evaluate the following chronic pain dimensions: behaviour and emotion, mobility, sensory perception, cognition and social interactions. The final version of the questionnaire comprised 37 questions. The questionnaire was translated into several languages and is accessible online.

The Xpertise QOA-Lyon tool was offered for completion to caregivers of cats, alongside the Feline musculoskeletal pain index - short form (FMPI-sf) questionnaire, which was considered as a partial reference tool. After completion, a satisfaction survey was sent to the caregivers. Descriptive statistics and correlation coefficients were performed.

Results

Between April and May 2025, 28 caregivers from six countries used the tool to assess their cats. Twenty-three cats were suffering OA signs and five deemed to be healthy. A strong correlation was observed between Xpertise QOA-Lyon and FMPI-SF global scores ($r = 0.81$) (fig 1). Overall Well-being and Pain scores were also positively correlated ($r = 0.69$) (fig 2).

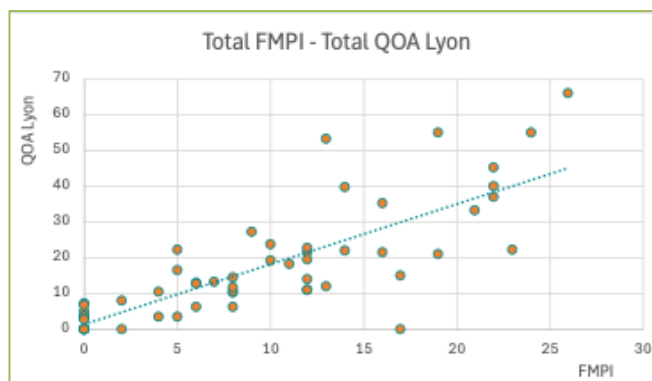


Figure 1: Scatter plot for relationship between QOA Lyon and FMPI scores

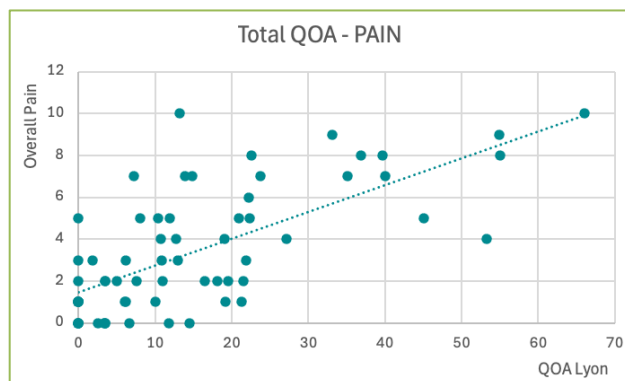


Figure 1: Scatter plot for relationship between QOA Lyon and Pain scores

Conclusion

Most clinical OA metrology instruments used in cats (including FMPI-SF) focus on function and mobility, which are only a part of the impact of chronic pain on an individual's quality of life. The correlation between the two tools is encouraging and provides evidence for convergent validity given they are measuring the impact of OA pain. However, the correlation is not perfect. This suggests, as expected, that the two tools are measuring overlapping but different aspects or dimensions. The FMPI-sf was developed to capture the impact of OA pain on function and mobility; the QOA-Lyon aims to detect how pain affects the cat's quality of life, and therefore capture the effects on a wider range of dimensions.

Our research supports moving to further validation studies of this new tool as a Health-Related Quality of Life Questionnaire in cats suffering OA.

SCAN HERE TO TRY QOA-LYON →



References:

- Bennett, D. et al. 2012. Osteoarthritis in the cat. How common is it and how easy to recognise? *Journal of Feline Medicine and Surgery*. 14(1):65–75
- Enomoto, M. et al. 2022. Refinement of the Feline Musculoskeletal Pain Index (FMPI) and development of the short-form FMPI. *Journal of Feline Medicine and Surgery*. 24(2):142-151.