

New tool to help diagnose canine arthritis

June 4 2013



Veterinary scientists at the University of Liverpool have developed a new tool to support clinicians in treatment programmes for osteoarthritis in dogs.

Unlike most other diseases, which can be monitored by blood tests, there is no test for how uncomfortable a dog is when walking or how good their quality of life is as arthritis progresses.

Subjective

At Liverpool, veterinary scientists can measure ground reaction forces, such as peak vertical force, using force platforms or pressure-sensitive walkways, as a reliable way of measuring limb function, but it is currently available at very few research centres in the UK.

Dr Ben Walton, from the University's School of Veterinary Science, said: "In first opinion and referral practices canine mobility is assessed in a subjective fashion, either by a vet or owner. Assessment can differ between vets, and if more than one limb is affected it becomes even more difficult.

"Pain and mobility associated with this condition depends on recent activity levels, medication and even [weather conditions](#), which mean that a dog can have good and bad periods and any physical assessment will only provide a snapshot of the disease."

Dr Walton continued: "The most reliable data on this disease is often gathered from informally asking owners for their observations of their pet's behaviour. The difficulty until now has been knowing how to reliably record this valuable information so that it can be recalled the next time the patient visits."

The team at Liverpool has devised a new tool, in questionnaire form, that attaches score rates to quantify the level of disease against key questions addressed to the dog's owner. The information is recorded digitally so that it can be referred to throughout a patient's treatment programme.

Grade activity and exercise levels

Owners are asked to grade their dog's activity and [exercise levels](#), [stiffness](#) and [lameness](#), and any changes that occur in different weather conditions.

Dr Walton added: "Pain is a subjective experience, so it is not unreasonable to measure it on a subjective scale. Owners are the best judge of their pet's behaviour and how they might be feeling.

"This record of behaviour history, together with clinical assessment, could provide a more detailed understanding of how the disease is progressing, and importantly how healthy and comfortable the dog is."

Provided by University of Liverpool

Citation: New tool to help diagnose canine arthritis (2013, June 4) retrieved 18 April 2024 from <https://phys.org/news/2013-06-tool-canine-arthritis.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.