This is the peer-reviewed, manuscript version of the following article:


The final version is available online via http://dx.doi.org/10.1136/vr.h5927.

The full details of the published version of the article are as follows:

TITLE: Diagnosis and treatment of canine neuropathic pain
AUTHORS: Sanchis-Mora, S., Pelligand, L., Volk, H. A. and Abeyesinghe, S. M.
JOURNAL TITLE: Veterinary Record
VOLUME/EDITION: 177/18
PUBLISHER: BMJ Publishing Group
PUBLICATION DATE: 7 November 2015
DOI: 10.1136/vr.h5927
Diagnosis and treatment of canine neuropathic pain

Sandra Sanchis-Mora, Ludovic Pelligand, Holger A. Volk and Siobhan M. Abeyesinghe

a. Royal Veterinary College, North Mymms, Hatfield, Hertfordshire, AL9 7TA. United Kingdom.

Email address: ssnachismora@rvc.ac.uk
THE Royal Veterinary College (RVC) will be recruiting for a clinical trial to evaluate the effect of pregabalin in dogs suffering neuropathic pain from Chiari-like malformation and syringomyelia (CM/SM). We would be grateful if colleagues could contact us if dogs are presented to their clinics with suspected or confirmed CM/SM based on a recent or pending brain and spinal cord MRI diagnosis. Suitable dogs should only have received non-steroidal anti-inflammatory drugs as analgesics.

CM/SM are two closely linked conditions associated with an array of neurological signs that may severely impact upon quality of life. Estimates for prevalence of CM (with or without SM) in the cavalier King Charles spaniel range from 92 to 100 per cent (Couturier and others 2008, CerdaGonzalez and others 2009). Neuropathic pain is the most important and consistent clinical sign of CM/SM (Plessas and others 2012), and, in humans, is considered to be one of the most painful and challenging chronic pain syndromes to treat. However, it may be difficult to localise in veterinary patients because of animals’ inability to accurately self-report the full experience. We have established a multifaceted approach to quantify objectively the level of pain, as well as an owner questionnaire to assess observed behaviours correlated with neuropathic pain. Many different drugs have been proposed and are used for the management of the clinical signs but, for some of them, there is currently no evidence of their efficacy. Analgesic selection may depend on severity of pain perceived. Recently, drugs used in the management of neuropathic pain in humans have been used in dogs, such as the anticonvulsant pregabalin (Rusbridge and Jeffery 2008). The pharmacological profile of pregabalin suggests that a dosing schedule of every 12 hours may be appropriate. This is an advantage compared with gabapentin, which requires more frequent dosing to maintain minimum efficacious plasma concentrations (KuKanich 2013). To date, there is no objective data on the efficacy of pregabalin for treatment of neuropathic pain in dogs. The objective of the study is to evaluate the efficacy of pregabalin on the treatment of neuropathic pain and to
establish the effective plasma concentration window for therapeutic drug monitoring.

Assessment of the efficacy will be evaluated with the objective measurements and an owner questionnaire. The study is approved by the Royal Veterinary College Ethical Committee (URN 2013 1243). Colleagues who would like further information regarding the study or who have suitable cases can contact us via the study e-mail address: neuropathicpain@rvc.ac.uk or by calling 01707 666605.

Sandra Sanchis-Mora, Ludovic Pelligand, Holger A. Volk, Siobhan M. Abeyesinghe, Royal Veterinary College, Hawkshead Lane North Mymms AL9 7TA e-mail: ssanachismora@rvc.ac.uk
References


