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Sanchis-Mora, S., Pelligand, L., Volk, H. A. and Abeyesinghe, S. M. (2015) 'Diagnosis and treatment of canine neuropathic pain', *Veterinary Record*, 177(18), 470.

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

1 **Diagnosis and treatment of canine neuropathic pain**

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

14 CM/SM are two closely linked conditions associated with an array of neurological signs that
15 may severely impact upon quality of life. Estimates for prevalence of CM (with or without
16 SM) in the cavalier King Charles spaniel range from 92 to 100 per cent (Couturier and others
17 2008, CerdaGonzalez and others 2009). Neuropathic pain is the most important and
18 consistent clinical sign of CM/SM (Plessas and others 2012), and, in humans, is considered to
19 be one of the most painful and challenging chronic pain syndromes to treat. However, it may
20 be difficult to localise in veterinary patients because of animals' inability to accurately self-
21 report the full experience. We have established a multifaceted approach to quantify
22 objectively the level of pain, as well as an owner questionnaire to assess observed behaviours
23 correlated with neuropathic pain. Many different drugs have been proposed and are used for
24 the management of the clinical signs but, for some of them, there is currently no evidence of
25 their efficacy. Analgesic selection may depend on severity of pain perceived. Recently, drugs
26 used in the management of neuropathic pain in humans have been used in dogs, such as the
27 anticonvulsant pregabalin (Rusbridge and Jeffery 2008). The pharmacological profile of
28 pregabalin suggests that a dosing schedule of every 12 hours may be appropriate. This is an
29 advantage compared with gabapentin, which requires more frequent dosing to maintain
30 minimum efficacious plasma concentrations (KuKanich 2013). To date, there is no objective
31 data on the efficacy of pregabalin for treatment of neuropathic pain in dogs. The objective of
32 the study is to evaluate the efficacy of pregabalin on the treatment of neuropathic pain and to

33 establish the effective plasma concentration window for therapeutic drug monitoring.
34 Assessment of the efficacy will be evaluated with the objective measurements and an owner
35 questionnaire. The study is approved by the Royal Veterinary College Ethical Committee
36 (URN 2013 1243). Colleagues who would like further information regarding the study or
37 who have suitable cases can contact us via the study e-mail address: [neuropathicpain@rvc.](mailto:neuropathicpain@rvc.ac.uk)
38 [ac.uk](mailto:neuropathicpain@rvc.ac.uk) or by calling 01707 666605.

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