The accuracy of the patellar reflex for localization of the site of a single level thoracolumbar disc herniation in dogs

Abdel-Hakiem, M.; Asai, Y.; Kamishina, H. Katayama, M.; Uzuka, Y.

Abstract:

The patellar reflex was used in this study to determine the site of thoracolumbar spinal cord dysfunction (T3–L3 or L4–L6) as a result of disc herniation. The results of neurological examinations were compared with the findings of CT myelography. This study was conducted on 21 dogs, selected from a total of 26 dogs confirmed to have a single thoracolumbar lesion. Results revealed that the accuracy of the patellar reflex for lesion localization was 71.4%. The accuracy of the patellar reflex (normal or hyperreflexic) for lesion localization in the T3–L3 segment in 15 dogs was 100%, while the accuracy of the depressed patellar reflex for lesion localization in the L4–L6 segment in 6 dogs was 0%. The accuracy of the patellar reflex for detection of laterality of a thoracolumbar lesion was low (33.33%). The results suggest that the patellar reflex was not reliable for neurolocalization of thoracolumbar spinal cord lesions in dogs. This could be related to the fact that the depressed reflex did not always refer to a lesion in the L4–L6 spinal cord segment. Moreover, the patellar reflex was not reliable in detecting the laterality of thoracolumbar lesions.

Keywords:

Accuracy, CT myelography, dogs, patellar reflex, thoracolumbar disc herniation

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