The assessment of ventral cervical decompression in the treatment of prolapse of the nucleus pulposus in dogs

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Abstract

The aim of the study is the assessment of treatment effectiveness of disc extrusion with the method of ventral cervical decompression (ventral slot). Surgical procedure was performed on 15 dogs – 10 chondrodystrophoid and 5 achondrodystrophoid. Clinical signs and localization of lesions were similar to those reported earlier. All of the dogs, but one which died during the operation, were cured. Percentage of dogs which recovered within 7 days since the surgery is slightly higher than in the previous reports. Atypical mass of nucleus pulposus displaced to the vertebral canal is described and the observation of atypical course of worsening after fenestration is presented.

Key words: dog, ventral slot, cervical intervertebral disc disease

Introduction

Ventral cervical decompression (ventral slot) is a commonly accepted surgical technique in veterinary medicine. The creator of this method is Steven S. Swaim (Swaim 1974) who adapted the method by Cloward which is used in human medicine. After 18 experiments on dogs this method was performed on 29 patients. It is proposed as a proper solution for extracting the mass of nucleus pulposus which was extruded to the vertebral canal and occupies it causing certain neurological symptoms. Thus it refers to the treatment of the disc extrusion (DE) of type I according to Hansen (Hansen 1952). However, some authors (Rusbridge et al. 1998) use that method in the treatment of the disc protrusion (type II according to Hansen) in the course of the treatment of the instability syndrome.

This publication aims at presentation of the results of performing the cervical ventral decompression (VD) in the treatment of disc extrusion (DE) in 15 dogs.

Materials and Methods

The patients

Clinical material comprised dogs which were patients of the Clinic for Small Animals Department of Clinical Sciences of the Faculty of Veterinary Medicine, Warsaw Agricultural University – SGGW and Veterinary Clinic “Bemowo” in Warsaw, treated in the years 2001-2006. Eighteen dogs were classified for ventral decompression treatment. In two dogs the mass of extruded disc was not removed because of bleeding from venous sinus. In one case, the contact