The Changing Face of Myelomalacia

The term myelomalacia normally refers to hemorrhagic infarction of the spinal cord that can occur as a sequel to acute injury, such as that caused by intervertebral disc extrusion. It may be a focal lesion, or it may spread cranially and caudally along the spinal cord, resulting in a diffused severe lesion. Clinical signs of myelomalacia may include total areflexia of the pelvic limbs, tail, and anus; flaccid paraplegia; loss of deep pain perception caudal to the site of spinal cord injury; and respiratory difficulty due to intercostal and diaphragmatic paralysis.

This study retrospectively identified dogs that had myelography indicated for spinal cord disease. The goal was to describe the myelographic features of myelomalacia in a series of dogs. All dogs had myelography on the day of hospital admission. Iohexol was injected into the lumbar subarachnoid space except in one dog, which had injection into the cerebellomedullary cistern. Only 7 dogs were identified as having myelomalacia during the study period. There was myelographic evidence of spinal cord swelling in 6 out of 7 dogs. The only convincing myelographic sign in one dog was spinal cord swelling. One of the dogs had opacification of the central spinal canal following lumbar myelography. From this small sample, it appears that signs of myelomalacia on myelography vary. Most affected dogs had evidence of contrast medium infiltration into the spinal cord. As in another study, the more marked the swelling, the poorer the prognosis.