

CEREBRAL HYDATID CYST (ECHINOCOCCUS GRANULOSUS) IN A MOOSE (ALCES ALCES)¹

Arno Wünschmann², Anibal G. Armién², and Michelle Carstensen³

HISTORY

On January 30, 2013, a free-ranging, 11-year old, female moose (*Alces alces*) was captured, equipped with a satellite-linked Global Positioning System (GPS) collar by the Minnesota Department of Natural Resources (MDNR) and released. The moose was part of a study to examine the causes of mortality in Minnesota's declining moose population. A mortality signal was emitted from the GPS collar on December 07, 2013. The carcass was found intact, without signs of predation or scavenging, and was extracted from the field and underwent necropsy to the Minnesota Veterinary Diagnostic Laboratory (MVDL) 2 days after the mortality signal was first received.

GROSS FINDINGS

The animal weighed 439kg and had moderate internal fat stores although measurable subcutaneous fat stores were absent in the rump region and near the base of the tail. An approximately 7 cm by 5 cm by 3 cm unilocular cyst replaced large portions of the frontal and parietal lobe of the right cerebral hemisphere. The cyst was slightly raised over the meningeal surface and extended through the entire cortex abutting against and distorting the right lateral ventricle. The inner surface of the right parietal bone had a slight depression that conformed to the raised aspect of the cyst. The cyst was bordered by an approximately 2 mm thick opaque wall. The cyst contained clear watery fluid with sandy material. The right caudate nucleus was softened and slightly discolored. The brain parenchyma neighboring the cyst was compressed and the midline of the cerebrum was deviated to the left.

¹Journal of the American Veterinary Association 2020: *in press*.

²Minnesota Veterinary Diagnostic Laboratory, College of Veterinary Medicine, University of Minnesota, St. Paul. MN. USA

³Minnesota Department of Natural Resources, 5463 West Broadway, Forest Lake, MN 55025, USA