



One Happy Ending

Laura Greenhalgh, Animal Health and Welfare Specialist

The Chief Veterinary Office's (CVO) Animal Welfare Team conducts over 1000 inspections every year on companion animals and livestock, with the majority of inspections determining there to be non-compliance of the Animal Care Act. Under the Act, veterinarians have a duty to report suspected neglect or abuse of animals. One such example was reported by a veterinarian who diagnosed a dog with parvovirus, and despite the dog being gravely ill, the owners did not have the resources to follow the veterinarian's treatment options. As time passed, the dog continued to decline and an Animal Protection Officer (APO) intervened to ensure the dog was provided with the veterinary medical attention it desperately needed. After days of intensive care, the dog made a full recovery and ultimately became custody of the CVO. Thanks to the Animal Welfare team, veterinary medical team, and some tender loving care, the dog pulled through the serious illness.

All the veterinarians and veterinary technologists who treated the dog (across 3 hospitals), noted in the medical records how friendly and affectionate the dog was, despite being unable to stand, walk, or eat. Once the dog became adoptable, it had a successful meet-and-greet with a family who had recently lost their beloved old dog. They were met with a wagging tail, pleads for belly rubs, and an easygoing demeanor. The dog was adopted into its new home where it will have a lifetime of being doted upon, going on adventures, and bringing so much joy just by being its sweet self.

While it is emotionally challenging working in animal welfare, the team always leaves animals in improved condition from how they were first encountered. The outcomes of animal welfare inspections include owners following the recommendations they are given to improve the living conditions of their animals, animals being rehomed and offered a new life, or a humane ending for animals suffering extreme distress. The team uses many resources to help the animals get a second chance and truly celebrate happy endings like the story above.

ISO/IEC 17025 Accreditation Update

The Microbiology Section has successfully obtained ISO/IEC 17025 accreditation for Isolation and Identification of Salmonella from Poultry Environmental Samples and Brucellosis-BPAT Testing from the Standards Council of Canada. As reported in our September issue, this will open Microbiology to international recognition & collaboration, recognizes their technical competency, and increases lab efficiency. Thank you to our dedicated laboratory staff who worked to achieve this significant milestone!

Holiday Closures

VDS will be closed on the following days:

- Christmas Day – December 25, 2023
- Boxing Day – December 26, 2023
- New Year's Day – January 1, 2024

VDS Team

Dr. Scott Zaari – Chief Veterinary Officer

Dr. Md Niaz Rahim – Molecular Biologist

Dr. Neil Pople – Anatomic Pathologist/ Veterinary Microbiologist

Dr. Marek Tomczyk – Anatomic Pathologist

Dr. Brenda Bryan – Anatomic Pathologist

Dr. Vasyl Shpyrka – Anatomic Pathologist

Dr. Karlyn Bland – Clinical Pathologist

Shannon Korosec – Supervisor, Microbiology

Tracy Scammell-LaFleur – Supervisor, Virology

Rhonda Gregoire – Supervisor, Clinical Pathology

Agnieszka Gigiel – Supervisor, Accessioning

Genedine Quisumbing – Quality Assurance Officer

Sharon Niebel – SAP/Revenue Clerk

Lindsay McDonald Dickson – SAP Clerk

Barb Bednarski – Client Services Coordinator/Reception

Vent Cannibalism in a Laying Hen

Dr. Brenda Bryan, DVM, MVetSc, VDS Pathologist

A small flock owner discovered three laying hens deceased over a 24 hour period and submitted the birds to the Small Flock Avian Influenza Program offered by Manitoba Agriculture. Information concerning the program can be found [here](#).

Necropsy revealed a 2cm large vent opening having ragged, dark red to brown edges. The feathers adjacent to the vent were bloody and skin surrounding the vent and extending in a V-shape toward the abdomen was red and deeply ulcerated. Abdominal abnormalities included absence of the intestines except for 2cm of the duodenum, a large blood clot adjacent to the liver and a large perforation in the oviduct at the level of the cloaca.

The hen was diagnosed with vent cannibalism, which is characterized by a large, raw, gaping, ragged red vent opening, as well as ulceration of the skin and bloody feathers around the vent. Extreme blood loss occurs over a few hours to days, with death secondary to exsanguination. In commercial settings, once a bird develops the habit, it will continue and waves of vent picking or cannibalism will occur across the barn, resulting in other hens experiencing similar trauma.

Hens are attracted to the protrusion of the red to dark pink distal oviduct which is visible when an egg exits a bird. Aggressive, bully hens may then peck at the vent and cloacal mucosa and other birds then learn the same behaviour.



Example of vent cannibalism - large vent opening and red brown discoloration and ulceration of the skin surrounding the vent. Photo provided by Dr. Bryan.



Abdominal abnormalities - large blood clot near the liver, perforation of the oviduct and absence of a majority of the intestines. Photo provided by Dr. Bryan.

Other predisposing factors in small flocks may include higher than recommended light intensity, high stocking-density, feed being withheld for too long, and decreased levels of dietary protein, amino acids or salt (blood is salty and they will crave it).

Control of cannibalism includes reducing the light intensity or using red light, providing a nest box for each hen, removing affected birds until they heal, increasing environmental enrichments, removing bully hens and feeding a commercial layer ration immediately.

New Test Available: Sapo Virus PCR

The SAPO virus real-time PCR has been validated at VDS and is available to clients.

Pet Spotlight: Gimli



Gimli is a 13 week old Schnauzer puppy who belongs to Bryan McLean, an Animal Health & Welfare Specialist with the branch.

Gimli is an adorable handful, and all his dad wants for Christmas is for him to start sleeping more!

We love sharing photos!

We encourage VDS clients and Animal Health & Welfare staff to send any great animal photos or Manitoba moments our way to share with the veterinary community.

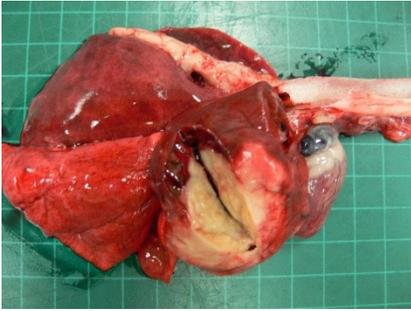
Photos can be sent to chiefveterinaryoffice@gov.mb.ca with the subject "VDS Lab Notes Pet Photos".

Did You Know?

Manitoba's Festival du Voyageur is Western Canada's largest winter festival!

Feline Lesions in the Brain and Thoracic Cavity

Dr. Marek Tomczyk, DVM, Dipl. Anat. Path., VDS Pathologist

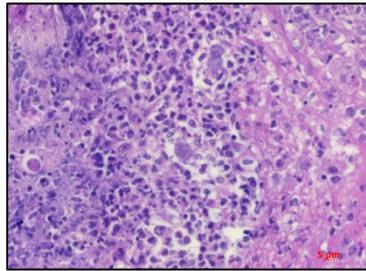


Pluck, photo provided by Dr. Tomczyk

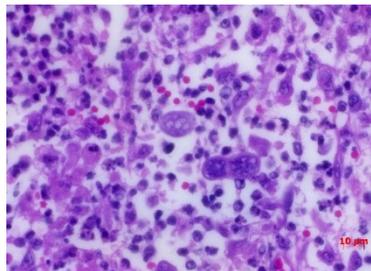
A two-year-old Burmese intact female was bought in the U.S. for breeding and kept indoors in Canada since its arrival. The animal was admitted to the Clinic with signs of sore back, but otherwise normal. The following day she was brought into the Clinic with CNS signs and had nystagmus. She was put on fluids but died two hours later. The body was sent to VDS for evaluation.

The necropsy showed there was a 4.0 cm x 3.0 cm x 4.0 cm mass involving the right middle lung lobe and extending to adjacent pericardial sac. On cross section, the firm external part of the mass was forming pseudo-capsule surrounding pale yellow semi-pasty caseous / necrotic material. The bronchial lymph nodes were twice the normal size. There was evidence of pulmonary atelectasis, oedema and sub pleural haemorrhages. There was also a 1.0 cm x 0.7 cm oval focus of malacia in the right lateral side of the midbrain. Tissues were collected and histopathology was performed.

Histopathology showed the lung architecture was effaced by per bronchial formation of large abscesses. Multifocal granuloma formations comprised central necrotic area surrounded by multiple epithelioid macrophages, neutrophils, histiocytic giant cells mixed with necrotic debris and broad based dimorphic fungal organisms. The yeast were 5-15 microns in diameter, round, non-encapsulated with a distinct wall of approximately 1 micron thick and granular protoplasm entirely filling the centre. Occasional yeasts displayed broad-based budding of the single daughter cell. At the periphery of the abscess fibrous connective tissue and foci of mineral deposition mixed with prominent numbers of cholesterol clefts were observed. Foci of granuloma formations on the pleural side were present and focally adjacent mesothelial cells were hypertrophied; multiple multinucleated giant cells were seen. Additionally, the cerebral cortex showed neuropil granuloma formations similar in appearance to those described in the lungs; multifocally perivascular lymphocytic cuffing was seen.



Lung, photo provided by Dr. Tomczyk



Brain, photo provided by Dr. Tomczyk

Morphological diagnoses: Granulomatous Encephalitis, Multifocal, Severe, Subacute to Chronic & Granulomatous Bronchopneumonia with Abscess formation, Multifocal, Severe, Chronic

The animal was diagnosed with *Blastomyces dermatidis*. Blastomycosis is an infection noncontagious disease of dogs and humans occasional cases in cat, horses, and other species. Endemically infected areas in North America include the Mississippi, Ohio and St. Lawrence River Basins, North-Western Ontario, and mid-Atlantic states. *Blastomyces dermatidis* is a dimorphic fungus which most often is found in lungs; however disseminated lesions as in this case may include lymph nodes and very rarely brain. Lesions in the brain explained the neurological signs that presented and the lung lesions were both severe and chronic.

Reference: Jubb, Kennedy, and Palmer's *Pathology of Domestic Animals*; editor M.G. Maxie; in: 'Bones and Joints' by L. E. Craig, K.E. Dittmer, K.G. Thompson 6th edition, volume 1, pages 103-104; (2016) and 'Special senses' by B.P. Wilcock, B.L. Njaa, 6th edition, volume 1, pages 449-451; (2016) and in 'Inflammation of the Central Nervous system' by C. Cantile and S. Youssef, 6th edition, volume 1, pages 386-393; (2016) and in 'Respiratory System' by J.L. Caswell and K.J. Williams 6th edition, volume 2, pages 579-582; (2016)

VDS Dashboard

Visit here for the latest information on cases counts, tests conducted, and pathology diagnoses.

Veterinary Diagnostic Services

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