

Veterinary Diagnostic Services Lab Notes

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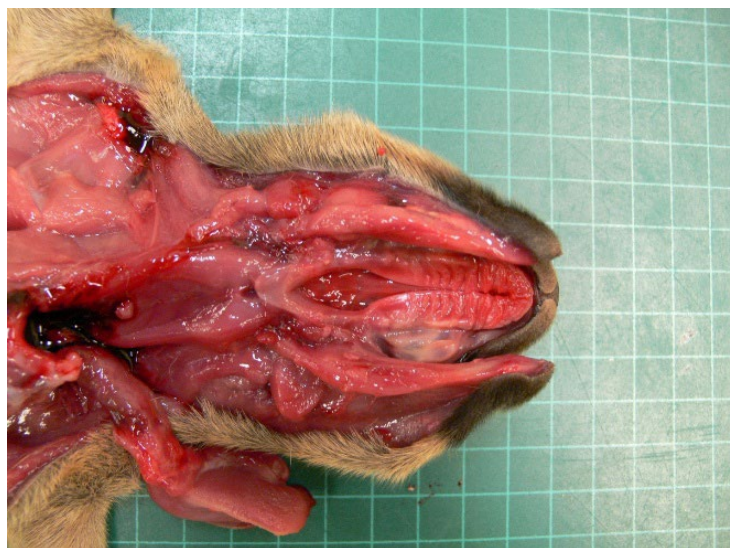
A Congenital Defect in a Finnish Spitz Puppy

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

A two-day old deceased, male, Finnish Spitz puppy was presented to VDS with concerns of congenital issues and the breed registry wishing to determine the cause of death. The puppy had a cleft palate (palatoschisis), with a communication between the oral and nasal passages being present in the rostral and caudal part of hard and soft palate. The middle part the palatine shelves were fused for 0.6 cm and caudally, the palatine shelves were V-shaped (pointed rostrally) and not fused. The soft palate was not fused from the rostral to caudal separation.

The lungs were wet, mottled red/brown and partially aerated. The liver was dark/brown and congested. The stomach was empty; duodenum and cranial jejunum were empty. Distal jejunum, ileum and colon were filled with meconium-like contents, while the rectum contained green/brown formed meconium/feces.

The puppy was diagnosed with a secondary cleft palate (palatoschisis), without lip involvement. The development of the normal face, jaws and oral cavity requires the integration of frontonasal, maxillary and mandibular embryonic processes. The complexity and duration of this development may lead to a variety of aberrations. They are expressed in the newborn in the form of clefts, resulting from failures of integrated growth and fusion of



The postmortem image demonstrates the separation in the rostral and caudal part of hard and soft palate (with the middle portion being fused for 0.6 cm). The soft palate was not fused from the rostral to caudal separation.

the processes. A common failure is that of the maxillary to frontonasal process. The primary cleft palate (harelip, cheiloschisis) includes developmental anomalies of the upper lip rostral to the nasal septum, columella, and premaxilla. They may be unilateral or bilateral, as well as superficial or extend into the nostril. The secondary cleft palate (palatoschisis) is often associated with

Holiday Closures

VDS will be closed on:

Remembrance Day

– November 11, 2025

Christmas – December 25, 2025

Boxing Day – December 26, 2025

New Years Day – January 1, 2026

VDS Team

Dr. Glen Duizer – Chief Veterinary Officer

Dr. Lisa Joachim – Provincial Veterinarian – Animal Welfare

Shannon Korosec – VDS Laboratory Manager and Supervisor, Microbiology

Dr. Md Niaz Rahim – Chief Scientific Officer

Dr. Neil Pople – Anatomic Pathologist/ Veterinary Microbiologist

Dr. Marek Tomczyk – Anatomic Pathologist

Dr. Brenda Bryan – Anatomic Pathologist

Dr. Vasyl Shpyrka – Diagnostic Pathologist

Dr. Karlyn Bland – Clinical Pathologist
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

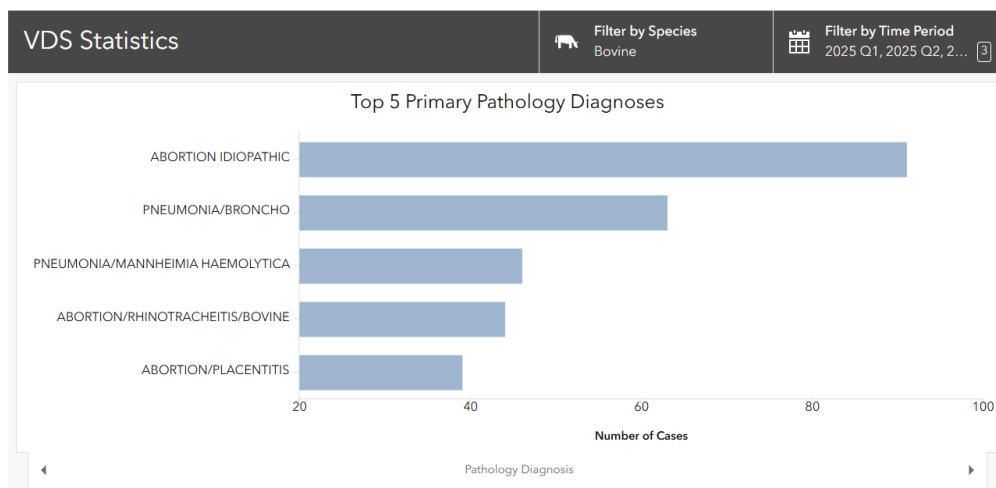
primary cleft palate. The normal hard palate is formed, except for a small rostral contribution from the frontonasal process, and by the bilateral ingrowth of the lateral palatine shelves from the maxillary processes, which was seen in this case. An additional abnormality in this case included bilateral hypoplasia of the soft palate. Failure of fusion leads to difficulty nursing, which was demonstrated with this two-day old male pup having an empty stomach and meconium that had not passed. This indicated lack of food intake and explained dehydration. Secondary cleft palate is a congenital defect and it is believed to be a combination of recessive genes that create this condition (e.g. the parents are not symptomatic but produce pups with the condition). It is important to attempt to identify carriers and seek to limit the spread of the defective gene.

New Masters Student Working With VDS

VDS welcomes Helia Fathpour, a University of Manitoba Medical Microbiology and Infectious Diseases Masters student under the supervision of Dr. Niaz Rahim, to the laboratory team. She will be working in VDS on a project focusing on improving the capacity and accuracy of animal disease diagnostic tests during the next few years. We look forward to the results and appreciate how Helia's work will contribute to animal health within the province. Welcome!

VDS Dashboard

Visit [here](#) for the latest information on VDS case counts, tests conducted and pathology diagnoses. One way these dashboards can be used by veterinary clinics is through incorporating the most common pathology diagnoses noted at VDS into client information materials. A screenshot from the VDS Statistics dashboard below shows the Top 5 Primary Pathology Diagnoses in cattle from the first three quarters of 2025. With pneumonia due to *Mannheimia hemolytica* being within the top five, private practitioners can use this information to remind producers that *M. hemolytica* is still very present in Manitoba cattle and vaccinating high risk animals may help prevent losses.



Pet Spotlight: Toto Jia

Toto Jia is a two-year-old Tabby who is sweet, gentle, and surprisingly sneaky. Although he wears a GPS, bell, collar, harness and leash on him, he moves like a ninja and catches voles, birds, and even rabbits. Toto's family is thankful that he keeps the garden safe from rabbits and voles, but they have sadly had to remove their bird feeder. Toto's favourite things include chicken, cotton string, catnip and mom and dad's bed.



We love sharing photos!

We encourage VDS clients and Animal Health and 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."

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