Tissue from a Dog
Case # TS16-68, Presentation #59

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Signalment

✓ Female, 5-week-old mixed breed dog

History

✓ 9th puppy to die from a litter of 14
✓ Euthanized after evidence of heart failure
✓ The dam entered a local shelter and received modified-live vaccine 3 days prior whelping
CD18-positive cells are most abundant in the lesions.
Morphological Diagnosis

Myocarditis, lymphoplasmacytic, chronic, multifocal, severe, with myonuclear inclusion bodies

Etiology

Canine Parvovirus 2
Canine Parvovirus Disease

Carrier dog excretes virus in feces

Clinical signs
- Hemorrhagic enteritis
- Myocarditis
- Lymphopenia

Viral replication in the intestinal crypts and the lymphoid organs

Oronasal route

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Chao-Nan Lin and Shu-Yun Chiang (2016)
Discussion

- The PCR-amplified CPV2 viral nucleotide sequence from the heart of necropsied animals was identical to that of the live-modified viral vaccine used at the shelter.

- Infection during early postnatal life through contact with viral fecal shedding from the vaccinated dam is the suspected mode of transmission.
REFERENCES


• Pesavento PA, Murphy BG. **Common and emerging infectious diseases in the animal shelter.** Vet Pathol. 2014 Mar;51(2):478-91.

• Sykes JE. **Canine Parvovirus Infections and Other Viral Enteritides.** In Canine and Feline Infectious Diseases. 2013 Elsevier Inc. p. 141-151.

Acknowledgments

- UF Histology lab
- Fellow residents
- UF IDP Pathology Faculty
Thank you!