

CANINE DIARRHEA AND VOMITING INVESTIGATIONS

Synonyms: (HGE [Hemorrhagic gastroenteritis], Canine Circovirus, Circovirus)

CASE DEFINITION

KEY: Still in progress

WORKING DEFINITION (9/11/13): Dog of any age, breed or sex exhibiting one or more of the following

Clinical signs:

- Vomiting (with or without blood)
- Diarrhea (with or without blood)
- Dehydration
- Hypovolemia
- Evidence of vascular disease (vasculitis) – hemorrhagic enteritis, skin, other
- DIC (disseminated intravascular coagulation)
- Fever (fever alone does **not** apply to this case definition)

Postmortem/Histopathologic lesions:

- Vasculitis
- Fibrinoid vascular necrosis
- Hemorrhage in gastrointestinal tract
- Thrombosis
- Granulomatous disease (e.g., lymphadenitis)

SAMPLES TO SUBMIT – FOR PRACTITIONERS

CLINICAL SAMPLES:

- 1) Red top (Serum) – 5-7 mL
- 2) Purple/lavender top (EDTA tube) – 5-7 mL
- 3) Feces (15-30 grams / milliliters preferred)

POSTMORTEM SAMPLES – FOR PRACTITIONERS:

FRESH SAMPLES:

- 1) Feces (15-30 grams / milliliters preferred)
- 2) Spleen (30 grams)
- 3) Mesenteric lymph nodes (some in formalin, also)
- 4) Tonsil (both preferred)
- 5) Liver (30 grams)

FORMALIN-FIXED SAMPLES:

- 1) Spleen
- 2) Mesenteric lymph node
- 3) Ileum with Peyer's patches
- 4) Tonsil
- 5) Jejunum, duodenum, colon (1 inch segments)
- 6) Any affected tissue

TESTS OFFERED:

MINIMAL PANEL FOR CLINICAL SAMPLES:

- 1) Accession fee - \$8
- 2) Fecal flotation/centrifugation – Can be done in house, document on submission form
- 3) Canine parvovirus assay – Can be done in house, document on submission form
- 4) Salmonella culture - \$19 at ADDL, NOTE: Fee waived if questionnaire completed and returned
- 5) PCR and/or ISH for canine circovirus - \$12 shipping fee only as of 9/12/13
- 6) If animal dies, histopathology of MINIMUM: spleen, mesenteric lymph node, tonsil, ileum, other intestines (2-4 slides depending on tissue numbers and size, \$18-36); full set of tissues preferred.

DIFFERENTIAL DIAGNOSIS

NOTE: 68% of 19 diarrheic dogs with Dog-CV+ feces were co-infected with ≥ 1 other pathogens*

VIRUSES

ADDL FEE

Canine circovirus	Shipping fee - \$12
Canine coronavirus (enteric) *	FA - \$4
Canine distemper virus	FA - \$4,
Canine parvovirus type 2	FA - \$4, PCR - \$30

BACTERIA

Campylobacter (coli or jejuni) *	Culture - \$12.50
Clostridium perfringens type A (α toxin) *	Culture - \$20
Salmonella sp. *	Culture - \$19 (waived if questionnaire completed)

PROTOZOA

Cryptosporidium *	FA - \$14 (with Giardia)
Giardia *	FA - \$14 (with Cryptosporidium)
Cystoisospora	See nematodes

NEMATODES

Fecal exam - \$14

Ancylostoma (Hooks)
Ascarids (Rounds)
Trichuris (Whips)

Samples to Submit

Clinical	Necropsy Fresh	Necropsy Formalin
Serum	Spleen (30g)	Spleen
EDTA	Mesenteric LN (10g)	Mesenteric LN
Feces	Liver (30g)	Liver
	Ileum with Peyer's patches	Ileum with Peyer's patches
	Feces (15g-30g)	Duodenum, Jejunum, Colon (2 inch sections)
	Tonsil	Tonsil
	Any affected tissue	Any affected tissue

Ancillary Tests Pricing

Accession Fee	8.00
Salmonella	19.00
Histopath Slides-4	36.00
Aerobic	18.50
Anaerobic	20.00
Campylobacter	12.50
Clostridium Perf. PCR	30.00
Fluorescent Antibody	
CCV	4.00
CDV	4.00
CPV-2	4.00
Giardia / Crypto	14.00
Fecal centrifugation	
R-H-W-C – Coccidia	14.00
EM	20.00
PCR-Parvo	30.00
PCR-Dog CV	12.00 Shipping