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Signalment & Presentation

• 10-month old male Pacer

• Presented with severe weakness

• Condition declined, he began to colic

• Cardiopulmonary resuscitation was attempted
Gross Findings
Gross Findings
Gross Findings

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Gross Findings
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Histopathology
Morphologic Diagnoses

- Severe, multifocal to coalescing, necrohemorrhagic and ulcerative typhlocolitis with massive submucosal edema, and intramucosal and intraluminal cyathostomes
Confirmatory testing

• Microbiological Findings:
• *Salmonella enterica*
Salmonella enterica

• Gram-negative, enteroinvasive bacteria

• Main serovars: enteritidis, typhimurium, typhi, agona

• Pathogenic – important zoonosis & nosocomial infection

• Generally minimal infective oral dose of $10^7$-$10^9$ organisms needed to infect
Salmonella

- Most common route – fecal-oral
- Reservoir – GI tract of warm-blooded animals
- Forms – septicemic, acute enteric, chronic enteric, and asymptomatic carrier state
- At risk – young animals; immunosuppressed; concurrent diseases; altered composition of the normal flora
Salmonella

• Pathogenesis – entry of bacteria → colonization → invasion

• Target cells – M cells in the follicle-associated epithelium overlying gut-associated lymphatic tissue in the distal small intestine and upper large bowel

• Can also affect – liver (paratyphoid nodules), and with septicemia can cause vasculitis, thromboembolism, hemorrhages and infarcts in other organs
Salmonella

• Diagnosis – culture

• Treatment – supportive care
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References


Questions?
Comments?