DOXYCYCLINE ESOPHAGITIS / STRICTURE IN CATS

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Doxycycline is commonly used in cats to treat many infectious diseases. The drug is acidic and can be caustic to esophageal epithelial cells. It may accumulate within epithelial cells, where it can decrease protein synthesis and potentially decrease mucosal repair. Esophagitis can progress to stricture formation after doxycycline administration in cats. These strictures result in dramatic reduction of the esophageal lumen and severe regurgitation. Treatment requires repeated endoscopic balloon dilation, which is an expensive invasive procedure.

Two recent studies in normal cats have clearly demonstrated that transport of capsules and tablets through the esophagus after “dry” swallows was very delayed. This delay is thought to be responsible for the development of esophagitis and subsequent esophageal stricture formation. As many sick cats are anorectic and potentially dehydrated, it is possible that esophageal transport of tablets and capsules may actually be slower than demonstrated experimentally. To aid transport of tablets and capsules and avoid stricture formation, a 6 ml water flush or a small amount of food should always follow doxycycline administration in cats.

RECTAL CYTOLOGY – IS IT WORTH DOING?

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Examination of a rectal cytology specimen is a rapid and low-cost diagnostic procedure that may yield or contribute to a definitive diagnosis in some cases with large bowel diarrhea. A gloved finger should be scraped across the rectal mucosa and gently rolled along a microscope slide. Alternatively a cytology spatula or moistened swab can be utilized. The slide is air dried, stained with Wright's stain and examined microscopically. A normal rectal cytology specimen should contain colonic epithelial cells, a mixed population of bacteria, low numbers of yeast, and a large amount of unidentifiable debris. Increased numbers of neutrophils suggests the presence of inflammatory or infectious disease and warrants culturing of feces for Campylobacter sp. or Salmonella sp. Eosinophils may be occasionally seen in cases of eosinophilic enterocolitis. On occasion, clumps of neoplastic cells or Histoplasma organisms within macrophages are found. Numerous "safety pin" shaped spores may support a diagnosis of Clostridium perfringens enterotoxigenic and suggests that fecal enterotoxin be assayed. A large population of "sea gull" shaped bacteria may be indicative of a Campylobacter sp. infection.