



## Pathology & Biology Section – 2008

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### **G24 Cytomegalovirus Enteritis With Profuse Gastrointestinal Bleeding Diagnosed at Autopsy: A Case Report and Review of the Literature**

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The objectives of this presentation are to discuss the causes of gastrointestinal hemorrhage and gastroenteritis with specific emphasis on the diagnosis of CMV enteritis and its potentially fatal outcome.

This case report and review of the literature will impact the forensic community by helping the medical and forensic community become aware of the potentially fatal outcome of CMV enteritis.

A diverse group of pathologic factors can produce profuse gastrointestinal hemorrhage. Common causes include peptic ulcer disease, esophageal varices, arteriovenous malformations, and Mallory-Weiss tears. Aortoenteric fistulas, chemical ingestions, tumors and viruses are among the rare entities that are associated with gastrointestinal hemorrhage. Often, when gastrointestinal hemorrhage is encountered at autopsy, the causality is straight forward. However, at times, the cause of hemorrhage is more obscure and the pathologist must consider those possibilities that are less common in order to identify the etiology.

We report a case of a 74-year-old African American female who succumbed to profuse gastrointestinal bleeding secondary to cytomegalovirus (CMV) enteritis. The decedent had a history of end stage renal disease secondary to Wegener Granulomatosis. She had recently been diagnosed with inflammatory bowel disease and diabetes. She was HIV negative. Prior to her death she was hospitalized after undergoing right hip hemiarthroplasty for a right femoral fracture. Her immediate post operative hospital course was uneventful. However, while hospitalized she developed bilateral arm tremors, weakness, and decline in her mental status. She was given the preliminary diagnosis of encephalopathy and it was felt that this was due to her chronic renal failure and a metabolic derangement. In the proceeding days, her blood pressure became labile, and despite full medical treatment she died. At autopsy profuse gastrointestinal hemorrhage and multiple gastrointestinal ulcerations were found. Microscopic examination revealed transmural necrosis and mucosal erosion of the large intestine and ulceration with chronic inflammation penetrating to the muscularis propria of the small intestine. In addition, scattered intestinal epithelial cells demonstrated "smudged" nuclear chromatin suggestive of viral infection. Subsequent special staining for cytomegalovirus was positive. Causes of profuse gastrointestinal hemorrhage and cytomegalovirus enteritis are discussed.

#### **Gastrointestinal Hemorrhage, Cytomegalovirus (CMV), Autopsy Ancillary Studies**