

## H81 An Autopsy of a Young Female With Abdominal Pain

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Learning Overview: After attending this presentation, attendees will appreciate the importance of autopsy as a tool to provide pathologic findings to clinicians and the importance of considering multiple differential diagnoses and risk factors.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by demonstrating the importance of postmortem autopsy in correlating pathologic findings with clinical impressions for both pathologists and clinicians, especially when a discrepant or unexpected diagnosis is revealed by an autopsy.

Despite advances in diagnoses and managements of Peptic Ulcer Disease (PUD), Pulmonary Thromboembolism (PE), and their complications, PUD and PE are still responsible for a substantial amount of morbidity and mortality. The differential diagnoses of acute abdominal pain in young females are complex and extensive, including gastrointestinal, gynecological, or obstetric pathologies. Many of the pathologies are surgically or medically treatable, if diagnosed promptly.

In this presentation, a case of a 29-year-old female with abdominal pain is reported. A few months prior to her death, she complained of abdominal pain and heavy vaginal bleeding and was subsequently diagnosed with adenomyosis. She underwent hysterectomy about one month prior to her death. About three weeks prior to her death, she started to complain of abdominal pain again, but did not seek medical attention as it was believed that pain was to be expected after the surgery. Days prior to her death, her pain worsened and she developed shortness of breath with a visibly distended abdomen. She was brought to a local hospital emergency department when she became dyspneic and unresponsive. She was later pronounced deceased shortly after arrival at the hospital. Her other medical history included previous PE, obesity, hypertension, seasonal asthma, and history of heavy smoking. She had no known history of illicit drug abuse. Her medication list included Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and oxycodone. An autopsy examination revealed gastric ulcer in the gastric antrum just proximal to the pyloric sphinter. No histologic evidence of neoplasm was noted of the ulcer. The peritonitis was mostly acute, with focal fibroblastic proliferation. There was a moderate amount of thromboemboli of various diameters in the pulmonary arteries, with microscopic features consistent with antemortem blood clots that caused pulmonary thromboembolism. Mild subdural hemorrhages were also found. Toxicology reported a therapeutic level of oxycodone. The cause of death was determined to be acute peritonitis due to perforated gastric ulcer, and PE; the manner of death was natural. In review of medical records, multiple risk factors for PE were identified, including recent surgery, obesity, and a history of PE. Opioid use, recent gynecologic surgery, and lack of follow-up medical evaluation were possible confounding factors that masked pain symptoms and made prompt diagnosis of PUD or PE more challenging.

PE, PUD, Risk Factors