

H106 Death Due to a Rare Complication of Colonoscopy and the Potential Medicolegal Implications

Katie Thompson, MD, University of Wisconsin Hospital and Clinics, 600 Highland Avenue, Madison, WI 53792; and Michael Stier, MD, University of Wisconsin Hospital and Clinics, 600 Highland Avenue, Madison, WI 53792*

After attending this presentation, attendees will better understand the theorized mechanisms, risk factors, presenting symptoms, and autopsy findings of splenic capsular avulsion. Attendees will also understand the possible medicolegal implications of this and other rare procedural complications.

This presentation will impact the forensic science community by providing an example of a rare life-threatening complication of a colonoscopy procedure and the potential medicolegal implications that could impact a forensic investigation.

A 64-year-old woman was found dead at home after undergoing a screening colonoscopy early that day. At autopsy, 1.9 liters of liquid and coagulated hemorrhage were discovered within her abdominal cavity. There was no evidence of perforation or mesenteric damage throughout the entire colon. The only major abnormality noted was non-traumatic avulsion of the splenic capsule. The underlying granular parenchyma was completely exposed and lacked any lacerations, hematomas, or other evidence of injury. After removal of the spleen, a shriveled capsular remnant was observed attached to the base of the hilum and surrounding the splenic vasculature. This was the only identifiable abnormality capable of causing the severe hemoperitoneum and demise of the patient.

Though rare, splenic capsule avulsion is a recognized complication of colonoscopy. The definitive etiology has not been fully established, but many have theorized that it results from excessive traction on the splenocolic ligament.^{1,2,4} This, in turn, results in a tear of the splenic capsule and resultant hemorrhage into the abdominal cavity. Most patients present within the first 24 hours after the procedure with non-specific symptoms. These symptoms can easily be dismissed as common post-procedural sequela, and many patients, such as the one reported here, may not seek medical attention. Numerous risk factors have been proposed, but due to the rarity of this complication, none have been specifically linked to splenic capsular avulsion with any high degree of certainty.

The range of incidence is estimated at approximately 0.001%-0.004%, though these numbers are most likely an underestimation.³ This may be in part due to the fear of legal reprisal and the desire for mitigation by institutions. In cases of splenic capsular avulsion, evidence of negligence, carelessness, or intentional harm is difficult to prove.² The breadth and depth of the medicolegal system does not allow for a simple or concise answer concerning liability in cases of such rare procedural complications. A large subdivision of procedural liability revolves around the laws governing informed consent and, since informed consent has no standardized overarching statutes, the laws in this realm are fluid. Forensic professionals may be called upon to offer expert testimony and having a basic understanding of liability can help better prepare forensic personnel for possible examination. It must also be remembered that care should be taken during legal proceedings to remain impartial and to refrain from speculation or persecution of a clinician's actions.⁵

In conclusion, the paucity of the literature in the area of splenic capsular avulsion after colonoscopy only reinforces the importance of reporting known cases, especially those that end in mortality and, by doing so, raising awareness of this rare but devastating complication of an otherwise beneficial screening procedure.

Reference(s):

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