# Splenic Hematoma Following Colonoscopy in a Patient with a Remote History of the Same

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## Introduction

Colonoscopy is commonly used in screening for colorectal cancer. It is an invaluable tool with diagnostic and therapeutic capabilities. Although it is generally considered to be a safe procedure, its complications can be life-threatening. Splenic injury is a rare but serious complication that ranges from subcapsular splenic hematoma to splenic rupture requiring emergency surgery and splenectomy. We present a 68-year-old female who developed a subcapsular splenic hematoma following colonoscopy that was successfully managed conservatively. Interestingly, she sustained a similar splenic injury after a colonoscopy 14 years prior. More than one occurrence of colonoscopy-related splenic injury in a single patient has not been documented to our knowledge.

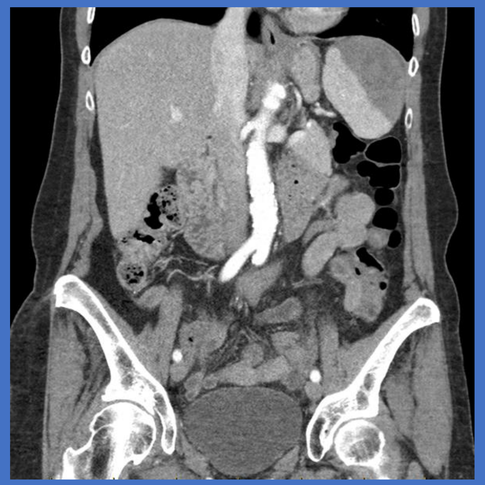
## Case Description

A 68-year-old female presented twenty-four hours after an unremarkable screening colonoscopy complaining of left upper quadrant abdominal pain. Her medical history was significant for hypertension and a previous colonoscopy-related grade 2 splenic injury 14 years prior. Her previous splenic injury was managed conservatively, and she had undergone two unremarkable screening colonoscopies since that time. The two colonoscopies that resulted in splenic injuries were performed by different endoscopists. Her recent procedure was notable for moderate looping that required external left lower abdominal pressure to intubate the cecum.

Her initial vital signs were within normal limits, and she was mildly tender in the left upper abdomen. Her initial hemoglobin was 12 g/dL and computed tomography revealed a grade 2 subcapsular splenic hematoma involving 40% of the splenic surface area. SHe was admitted for observation, monitored continuously, and her complete blood count was obtained every six hours. Her vital signs and hemoglobin remained unchanged while in the hospital and she was discharged the following day.









## Discussion

The benefits of colonoscopy for cancer screening purposes outweigh the potential risks, with colonoscopy-related complications occurring in 2.01 per 1,000 exams (1). Bleeding from a polypectomy site or perforation usually comes to mind, but splenic injury is a serious complication that may lead to a devastating outcome if overlooked. The rate of splenic injury following colonoscopy ranges from 0.20 to 0.34 per 10,000 procedures (2). This rare complication carries a 10% mortality rate (3). Computed tomography is the gold standard for diagnosis in a stable patient, whereas immediate surgery with splenectomy is required for patients in extremis. Undue tension placed on the splenocolic ligament is thought to be the mechanism of this injury.

Splenic injuries include subcapsular hematomas, laceration, and rupture. Subcapsular hematomas make up 63% of splenic injuries following colonoscopy. Abdominal pain is present in 87% of patients and 79% present within 24 hours (3,4). While this patient's presentation was classic, her history makes this a very interesting case. She was diagnosed with grade 2 splenic injury following a colonoscopy 14 years prior. Most traumatic splenic injuries showing complete radiographic resolution at 6 weeks (5). We present a patient who has been diagnosed with this rare complication after two separate screening colonoscopies performed by different endoscopists.

## Conclusion

Splenic injury is a rare but serious complication after colonoscopy. To our knowledge, this is the first report of recurrent splenic injury following screening colonoscopy.

References

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