Spontaneous Hemoperitoneum Following Colonoscopy

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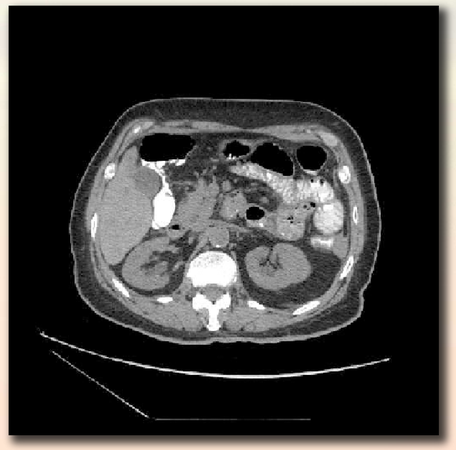
Introduction:

Colonoscopy is a routinely performed diagnostic and therapeutic procedure that carries a very low risk of complication at approximately 0.3%1. It is well known that bowel perforation and intraluminal bleeding are the most common issues seen in the emergency department (ED) following endoscopic procedures; however spontaneous hemoperitoneum has been documented in several case reports[2,3,4,5].

Case Presentation:

We describe a case of a 79 year old female that presented to the ED with intense abdominal pain several hours after a routine screening colonoscopy and was found to have hemoperitoneum as diagnosed by abdominal computed tomography (CT) scan.

The patient underwent a routine colonoscopy as performed by a colorectal surgeon on the morning of her presentation to the ED. Following the procedure she had informed the staff in the colonoscope suite that she was having pain in the left upper quadrant of her abdomen; she reports being told that it was probably retained gas and was subsequently discharged to home. While at home, the patient stated that her pain became very intense and began to radiate from her left upper abdomen into her left shoulder. After contacting her primary care physician, she proceeded to the ED.



On arrival in the ED the patient was found to be in moderate distress from pain, although she refused pain medications. Her pertinent medical history included hypertension, hypothyroidism, coronary artery disease; she denied prior abdominal surgery. Medications consisted of lisinopril,carvedilol, ezetimibe, simvastatin, and levothyroxine of unknown dosages, in addition to apirin 81mg twice a day. She had a documented allergy to IV contrast. Her vital signs were within normal limits except for a blood pressure of 162/67, which was attributed to pain. Her exam demonstrated severe reproducible tenderness in the epigastric area and left upper quadrant. Otherwise her abdomen was non-distended, with normal bowels sounds. It was noted that the patient's pain increased in the supine position.

Laboratory tests showed a hemoglobin concentration of 12.9 g/dL and hematocrit of 39.4%. Upright chest and abdominal radiographs showed no free air. Continued severe abdominal pain prompted a CT scan of the abdomen with oral contrast only due to her IV dye allergy. The CT demonstrated hemoperitoneum in the perisplenic and perihepatic region. The spleen appeared normal and there was no free air or extravasation. The patient underwent an emergent nuclear gastrointestinal bleeding scan that showed no active bleeding prior to her admission to the Colorectal Surgery service. Her repeat hemoglobin level 11 hours later was 11.4 g/dL. Subsequent measurements were stable, and she was discharged later that day.

This case describes spontaneous hemoperitoneum following colonoscopy. This condition is postulated to be secondary to a splenic capsular tear as the colonoscope causes traction on the splenocolic ligament2. Although complications are rare following routine colonoscopy, ED physicians should have a high index of suspicion for this entity. Any patient who complains of persistent abdominal pain with Kehr sign, in addition to new anemia or unstable vital signs should be monitored and aggressively investigated.

References:

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