

## Postcolonoscopy pancreatitis

Colonoscopy is a therapeutic and diagnostic procedure with complications commonly including intestinal perforation, splenic injury, gastrointestinal bleeding, and cardiopulmonary complications. We report the case of a 25-year-old woman who developed acute pancreatitis following a diagnostic colonoscopy.

The patient was being followed up after a right hemicolectomy with ileocecal anastomosis for adenocarcinoma of cecum 4 months prior to presentation. She had received two cycles of chemotherapy and a course of radiotherapy 1 month previously. The provisional plan was for her to undergo surgery to complete her treatment. She therefore underwent a colonoscopy to rule out a synchronous lesion and residual disease, which was normal. The colonoscopy could not however evaluate the ascending colon because of non-distension of the bowel.

The patient developed nausea with two episodes of vomiting and epigastric pain, 4 hours after the colonoscopy. Physical examination revealed tenderness in the epigastric region but no guarding or rigidity was noted. An abdominal ultrasound performed next day was unre-

markable. Laboratory test results showed markedly elevated levels of serum amylase at 1500 IU/L (normal 40–140 IU/L) and serum lipase at 512 IU/L (normal 0–160 IU/L) [1] confirming a diagnosis of acute pancreatitis. Other results are shown in **Table 1**. No computed tomography (CT) scan was performed and the patient was managed conservatively.

The common complications of colonoscopy include intestinal perforation, splenic injury [2], and, less commonly, sepsis and splenic trauma [3], among others. The most frequent causes of pancreatitis are gallstones and high alcohol intake [4]. Less frequent causes include metabolic derangements such as hypercalcemia and hypertriglyceridemia, trauma, and medications [3].

A review of the literature revealed three reported cases of colonoscopy-induced pancreatitis [3,5,6]. Two of the cases [5, 6] were technically challenging procedures: the colonoscope had been advanced beyond the splenic flexure, with excessive maneuvering and air insufflation, which was also done in our case. The third case [3] was an uncomplicated procedure. Another case of pancreatitis

was reported after combined upper and lower gastrointestinal endoscopies, which were uncomplicated procedures [7].

We agree with the authors of the other case reports [3, 5–7], who propose that mechanical injury to the body and tail of pancreas by the colonoscope is the likely root cause. Further, we propose that excessive bowel distension due to gas insufflation may have an independent, if minor, role in causing colonoscopy-related pancreatitis.

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**Competing interests:** None

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Test	Result	Normal range
Hemoglobin, g/dL	17.2	12–17
Total leukocyte count, cells/mm <sup>3</sup>	8600	3900–10 700
Platelets, cells/mm <sup>3</sup>	130 000	150 000–350 000
Serum calcium (Ca <sup>2+</sup> ), mg/dL	8.4	8.4–10.5
Serum sodium (Na <sup>+</sup> ), mmol/L	136.0	135.0–145.0
Serum potassium (K <sup>+</sup> ) mmol/L	4.0	3.5–5.0
Blood urea, mg/dL	23	15–40
Serum creatinine, mg/dL	0.8	0.7–1.3
Blood glucose, mg/dL	93	70–110
Serum bilirubin, mg/dL	0.7	0.4–1.5
Serum alkaline phosphatase, IU/L	70	36–92
Aspartate transaminase (AST), IU/L	31	0–55
Alanine transaminase (ALT), IU/L	23	0–48
Total protein, g/dL	4.4	6.0–8.0
Albumin, g/dL	2.0	3.1–4.3
Prothrombin time, seconds	12.5	11–13
Activated partial thromboplastin time (APTT), seconds	28.1	25–35
Serum cholesterol, mg/dL	99	<200
HDL, mg/dL	28	>40
VLDL, mg/dL	11	2–30
LDL, mg/dL	60	<130
Triglycerides, mg/dL	54	<150

HDL, high density lipoprotein; VLDL, very low density lipoprotein; LDL, low density lipoprotein.

**Table 1** Results of blood tests taken after the patient developed vomiting and epigastric pain 4 hours after undergoing colonoscopy.

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**Bibliography**

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