

## COLONIC STENOSIS DUE TO PANCREATITIS Pankreatite bağı ortaya çıkan kolon stenozu

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**Summary:** Extrapancreatic manifestations of pancreatitis are numerous. Persistent or transient stenosis of the colon is a rare complication in the course of pancreatitis. It mimics colonic cancer but colonic stenosis is more commonly reversible. It would be reasonable to recommend a conservative approach in the majority of cases. Two cases of colonic stenosis are described here, and related literature is reviewed.

**Key Words:** Colonic stenosis, Pancreatitis

**Özet:** Pankreatite bağı çeşitli komplikasyonlar gelişebilmektedir. Bunlar arasında kolon stenozu oldukça nadir bir durumdur. Kolon kanserini taklit edebilen bu durum sıklıkla kendiliğinden düzelmektedir. Bu nedenle olguların çoğunda konservatif yaklaşım önerilmektedir. Burada kolon stenozu gelişen iki olgu sunulmuş ve ilgili literatür gözden geçirilmiştir.

**Anahtar Kelimeler:** Kolon stenozu, Pankreatit

Colonic complications of pancreatitis include localised adynamic ileus of colon (which gives colon cut off sign), colonic necrosis, fistulea, stenosis and variceal dilatations of colonic veins(1). Overall, they comprise about 1% of all complications of pancreatitis(2,3). Among them, colonic stenosis, described by Forlini in 1927, is extremely rare and easily omitted in differential diagnosis, resulting in unnecessary surgical operations(4).

Here in, two cases of colonic stenosis secondary to pancreatitis have been reported.

**CASE 1.** A 45-year-old woman had a sudden onset of nausea, vomiting and upper abdominal pain radiating to back. Physical examination revealed epigastric rebound tenderness and decreased bowel sounds. Laboratory investigations supported the preliminary diagnosis of acute pancreatitis.

Starting from the tenth day of follow up, recovery in the clinical picture and the lab data were observed. However, an epigastric mass was

palpated at the same time. Ultrasound (US) showed pseudokidney appearance in the upper abdomen, most probably involving the transverse colon. In barium contrast study (Figure 1 A), stenosis and inferior bowing of the transverse colon with mild irregularity of upper colonic margins as it approaches the splenic flexure, and rigid segments in splenic flexure and descending colon were observed. Epigastric mass persisted for more than ten days and the patient, suspected of having malignancy, was operated. Surgical exploration revealed an irregular mass involving left transverse hemicolon, splenic flexure and the whole descending colon with a hard rubbery consistence and areas of ecchymosis and fatty necrosis. Transverse mesocolon was contracted and there were areas of necrosis in the omentum, which were found to be fatty necrosis on histological sections. The pancreas was an inflammatory mass with a hard consistence. No colonic intervention was performed.

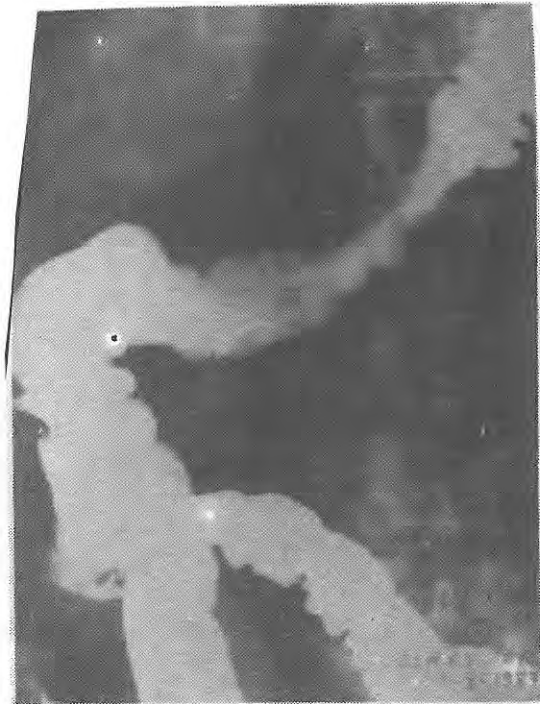
Gradual regression of the mass size and the barium enema findings ended up with complete recovery of the patient in three months (Figure 1 B,C).

**CASE 2.** A 57-year-old male patient was admitted to the hospital with a two-month history of

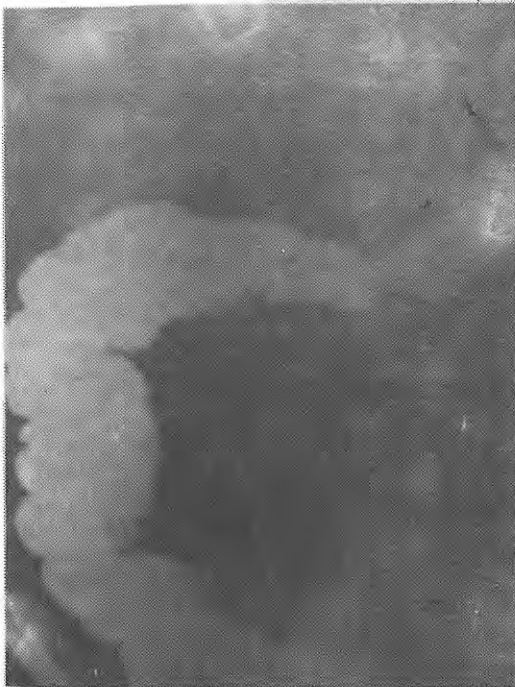
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intermittent epigastric pain, sometimes radiating to back. He had a weight loss of 10 kgs during this period. Epigastric and right upper quadrant tenderness were found on physical examination. The gamma glutamic transaminase (GGT) and amylase levels were 59 (N:7-45 U/L) and 100 (N:20-77 U/L) respectively. Having diagnosed as pancreatitis or gastrointestinal malignancy, barium enema revealed local stenosis and the signs of mucosal inflammation in the transverse colon (Figure 2A). US showed pseudokidney appearance in the same region and a pseudocyst in the pancreatic tail region, which was later confirmed by computed tomography(CT) (Figure 2 B). Distal pancreatectomy was performed and no colonic pathology was found in the operation. Postoperative barium enema examination was within normal limits (Figure 2 C).



**Figure 1 A.** The barium enema shows stenosis and inferior bowing of the transverse colon with mild irregularity



**Figure 1 B, C.** Gradual regression and complete recovery at one month (B) and three months (C) follow up examination



Figure 2 A. Local stenosis in the transverse colon

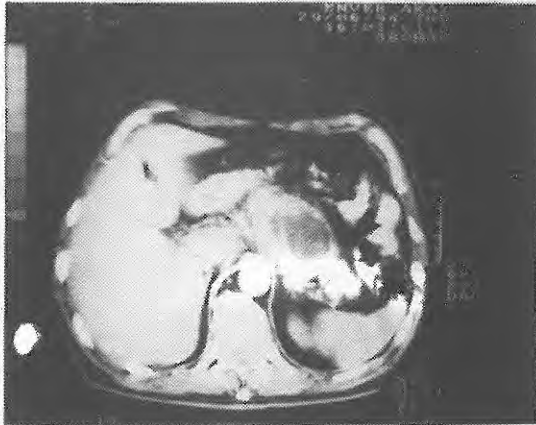


Figure 2 B. CT shows pseudocyst formation in the pancreatic corpus-tail region

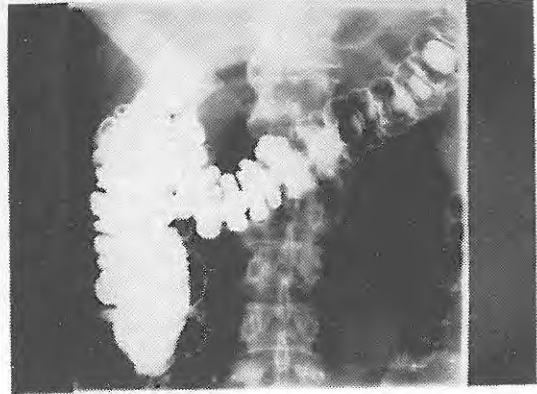


Figure 2 C. Post-op barium enema examination (one month later). Normal transverse colon

## DISCUSSION

The colonic stenosis secondary to pancreatitis is extremely rare. The limited number of case reports in the past literature are far beyond detecting the true incidence of the complication. Although Lukasch (2) and Abcarian et al. (3) have found the overall incidence of colonic complications of pancreatitis as 1%, Fekete (5) reported the colonic involvement in 1.5% of acute, and 7% of chronic pancreatitis cases, respectively. The anatomical proximity of the pancreas to the colon and the secondary inflammatory changes are the key factors in understanding the pathogenesis (1). According to Fekete (5), ischemic and the necrotic inflammatory changes in the acute phase, and, colonic retraction and the pseudocyst formation in the chronic phase result in the development of colonic stenosis secondary to pancreatitis. It's mostly observed between 10-21st days of the disease onset.

The barium enema is essential to the diagnosis. The typical lesion is an incomplete stenosis, mostly involving the splenic flexure(4,6-8). Since the

clinical and the radiological picture suggests malignancy, colonic stenosis as a diagnosis should be considered in the presence of the signs of the mucosal inflammation and the absence of a fixed stenosis (5). Such a consideration is vital in planning the treatment modality. Previous reports suggest that most patients are unnecessarily operated; since follow up examinations reveals the gradual resolution of the inflammatory mass spontaneously. Therefore, the initial approach should be conservative and the surgery should be

reserved to those having complete obstruction in the acute phase, and incomplete obstruction with a fixed stenosis in the chronic phase (5,9,10).

## CONCLUSION

Although it's a rare complication of pancreatitis, consideration of colonic stenosis in the differential diagnosis will prevent the unnecessary operations for an already reversible event.

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