COLON DUPLICATION COMPLICATED
BY PANCREATITIS AND SMALL BOWEL OBSTRUCTION

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ABSTRACT
This is a case report of a 9 months old patient who presented with digestive bleeding and pancreatitis. The patient was found to have a colon duplication penetrating in pancreas. The diagnosis and therapy are discussed. Sonography and CT scan were very helpfully in preoperative diagnosis. Surgical therapy included resection of the duplication and adjacent colon and suture of the pancreatic lesion. The outcome was complicated by an ileo-ileal intussusception in the 7th postoperative day. Thereafter the postoperative recovery was uneventful.

Key words: colon duplication, pancreatitis, small bowel obstruction

Case report
From 1992 to 1998 we treated 7 children with colorectal duplications. One of these patients, a 9/12-months old girl, presented with a very unusual clinic. After 2 days of restless episode the patient had a considerable bleeding per anus. The serum hemoglobin dropped at the level of 9,2g/dl. The pancreas enzymes were massive increased: amylase 333 U/l (normal: 29-98), lipase >1000 U/l (normal: 15-190).

The sonography finds out a cystic structure in the left upper quadrant of the abdomen. The following CT scan confirms this finding: CT scan diagnosis was “enteric duplication”. Intraoperative a spherical-cystic duplication of colon transversum was found. There was a narrow communication with the lumen of the colon. There was also a wide perforation of duplication into the pancreas and that explained the increase of the pancreas enzymes. The duplication and the correspondent colon segment were resected. The suture of the pancreas lesion was performed. Histological diagnosis was: colon duplication with ulceration and bleeding. Postoperative the pancreas enzymes regained normal values. The outcome was complicated by a small-bowel obstruction (ileo-ileal intussusception) in the 7th postoperative day. Open surgery was needed to resolve the intussusception. The patient left the hospital in good condition 1 week after the second operation.

Discussion
Enteric duplications are spherical-cystic or cylindrical-cystic lesions attached to the bowel wall, usually at the mesenterial edge. The incidence of all gastrointestinal duplications is rare (1:4,000 births), the rarest being the duplications of the colon (10%) (3).

Intestinal duplications may present with abdominal pain, vomiting, chronic constipation, intestinal or urinary obstruction, and abdominal mass. Additional presenting symptoms are GI bleeding, malabsorption syndromes, perianal fistulas, perineal abscess, perineal exophitic tumor, tumor of the labia, perineal hernia (2,4,5,6,7,9,10,11). Malignant change of duplication was reported also in child (8).

Sonography is nowadays an usual examination to diagnose nonspecific gastrointestinal complaints in children (11).

CT scan has a valuable role in selected patients. Ectopic gastric mucosa ectopy may be found in the cystic duplications: it may be the cause of peptic ulcerations with penetration and perforation in the surrounding structures. If ectopic gastric mucosa ectopy is present the technetium scans may identify the location of duplication (1,11).

The particularity of our patient is the association of duplication and pancreatitis. Very probably the bleed-

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ing was intensified through the activity of pancreas enzymes. Because of pathological anatomy of duplication (common irritation with superjacent bowel), spherical and short tubular duplications will be resected together with the superjacent bowel segment. When tubular duplications are large, resection may lead to short-gut syndrome. Different techniques have been used to avoid massive intestinal resection: a) mucosal stripping of the duplication through multiple incisions in the duplications wall and resection of the insertion in the bowel (10); b) partial resection and marsupialisation of the remnant into the alimentary tract; c) two-step surgical resection.

Though rare, colon duplication should be included in the differential diagnosis of acute bleeding per anus and of pancreatitis in infants and children.

REFERENCES