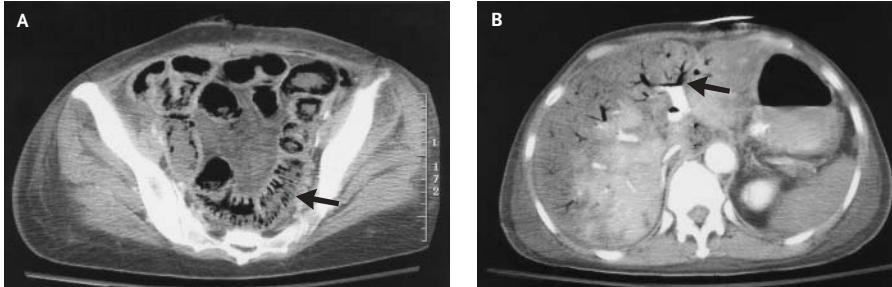


IMAGES IN CLINICAL MEDICINE

Pneumatosis Intestinalis and Portal Venous Gas



A 53-YEAR-OLD WOMAN WHO HAD RECENTLY BEEN TREATED FOR UL-CERATIVE COLITIS with high-dose prednisone and mercaptopurine was admitted with severe abdominal pain and signs of peritoneal irritation. Colonoscopy, radiography of the small intestine with contrast medium, and surgical exploration of the abdomen revealed fulminant colitis, primarily involving the left colon, but no apparent small-bowel disease. Total colectomy and an ileostomy were performed. On the fifth postoperative day, the patient's clinical condition deteriorated rapidly, with respiratory failure, anuric renal failure, and profound metabolic acidosis. Computed tomography (CT) of the abdomen showed slight dilatation, mesenteric edema, diffuse pneumatosis intestinalis throughout the small intestine, and gas in the bowel wall (arrow, Panel A). CT imaging also revealed gas throughout the portal venous system, including the hepatic venous radicals, and portal venous air–fluid levels (arrow, Panel B). The patient had an unrelenting, downhill course and died shortly thereafter. At autopsy there was no clear explanation for the deteriorating clinical course, aside from the findings of diffuse inflammatory and ischemic changes of the small bowel.

Radiographic findings of diffuse pneumatosis intestinalis and portal venous gas, such as those seen in this patient, are characteristic of necrotizing enterocolitis. Although it is typically found in premature neonates, necrotizing enterocolitis has also been described in adults, particularly those with cirrhosis and immunocompromise.

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