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Case reports: intestinal pneumatosis and portomesenteric venous gas - rare signs of grave outcome.

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Introduction

Intestinal pneumatosis (IP) and portomesenteric venous gas (PMVG) on contrast enhanced abdominal computed tomography (CT) can be found in patients with different abdominal emergencies and also benign conditions. When IP is present in conjunction with PMVG in patients with acute mesenteric ischemia (AMI), it predicts transmural bowel wall necrosis and often is associated with increased mortality.

Case Reports

- 66 years old male
- four day history of severe abdominal pain
- Atrial fibrillation of unknown duration on electrocardiogram
- Abdominal CT
 - superior mesenteric artery embolism
 - diffuse small bowel and ascending colon IP (image 1)

- 88 years old female
- 24 hour history of severe abdominal pain
- Abdominal CT
 - superior mesenteric artery atherosclerosis with secondary thrombosis
 - partial small bowel IP (image 3)
 - PMVG (image 4)

• PMVG (image 2)





Patient refused surgery and received medical treatment.

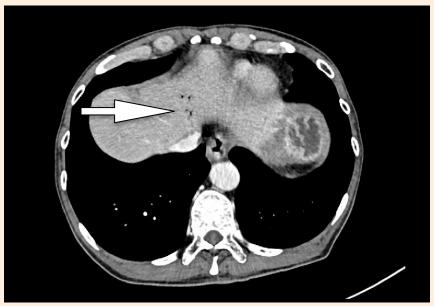


Image 2.



Patient underwent resection of necrotic small bowel and aortomesenteric shunting with synthetic prosthesis.

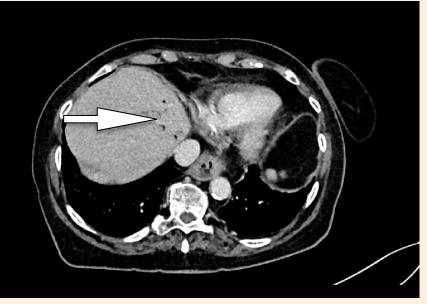


Image 4.

Both patients died of sepsis, septic shock within a couple of days after hospitalization.

Conclusion

Intestinal pneumatosis and portomesenteric venous gas in case of acute mesenteric ischemia is a sign of longer duration of bowel ischemia, patients present to the emergency department in worse general condition due to bowel necrosis, peritonitis and sepsis and have high mortality.