

Case	(480) A case report of intestinal pneumatosis and bladder pneumatosis.
Authors	Y. Del Rosario Vega, J. Sánchez Dalmau, M. García De Las Heras, C. Córdova Muñoz, S. Sánchez Gutierrez, E. Izquierdo Milla.
Centre	H.u De Móstoles.

## CASE PRESENTATION

A 91-year-old woman with medical history of acute myocardial infarction and atrial fibrillation (AF) she was brought to the emergency room complaining of diffuse abdominal pain in the last 48 hours, associated with two episode of vomiting. There was with no history of recent abdominal surgery.

On the physical exam she had diffuse abdominal tenderness without peritoneal signs. Blood pressure: 90/55, Pulse: 94pm. Laboratory tests showed leukocytosis 15,000; hyperglycemia 195, Na 134; K 3,5, lactate 3.7. The remained laboratory tests were within the normal limits, included urine test. Abdominal Xray revealed findings suggestive of pneumatosis in small bowel loops and pneumoperitoneum as confirmed in the CT-scan that also showed portal pneumatosis (PN) and bladder pneumatosis (BN).

Despite the presence of signs of extensive atherosclerotic disease, permeability of the visceral vascular system was observed. Conservative treatment was decided with clinical improvement of the patient and practical resolution of the radiological findings in just four days. Another similar episode occurred a few months later with equally favorable resolution.

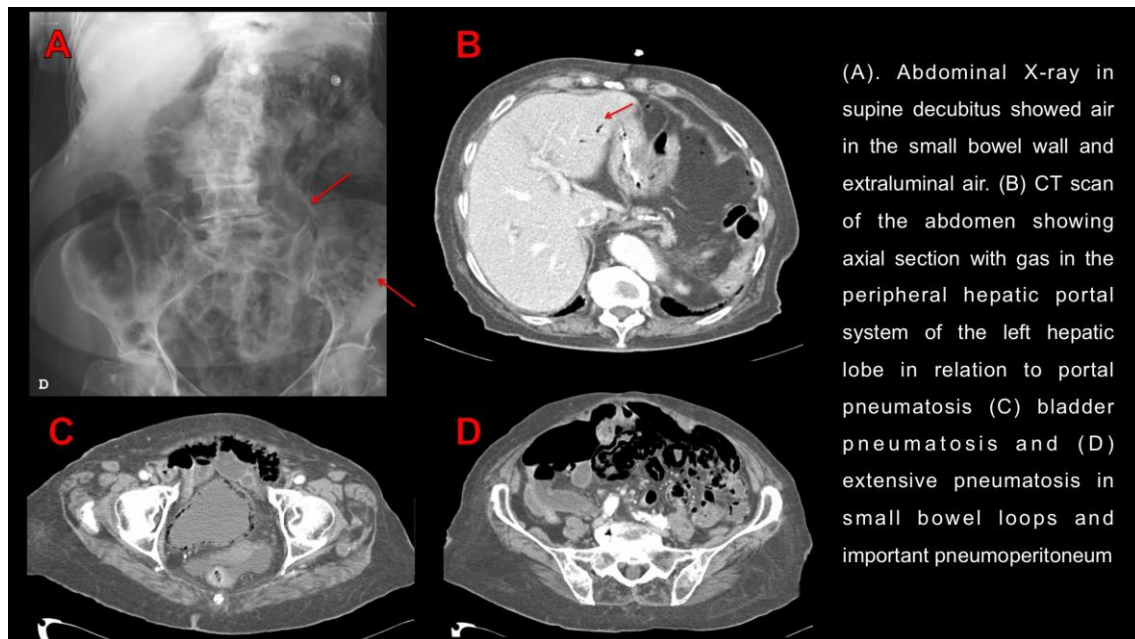
## DISCUSSION

Differential radiological diagnosis included:

- Infectious aetiology: BN is a rare finding that has been associated with emphysematous cystitis in diabetic patients, but in this case there was no compatible clinical history.
- Ischemic cause: Portal pneumatosis and pneumoperitoneum are signs suggestive of acute mesenteric ischemia (AMSI), although no thrombosis was identified in the visceral vascular system, an acute state of low cardiac output could be a possible cause of AMSI in this case.
- Cardioembolic cause: it was also considered as a more remote possibility due to the involvement of organs from different vascular territories, the small intestine and the bladder in this case, as well as the patient's history of AF.
- Finally the benign etiology is plausible given the spontaneous and rapid resolution of the clinical picture and its tendency to recur. In addition, the gas disposition in the intestinal wall corresponded to the circular pattern that is most frequently associated with cystoid pneumatosis.

## CONCLUSION

There are several causes of intestinal pneumatosis, some of them are a threat to the patient's life. Performing a differential diagnosis that includes the clinical and radiological findings is very useful for management of this patient.



## BIBLIOGRAPHY

- Ho LM; Paulson LK; Thompson WM. Pneumatosis Intestinalis in the Adult: Benign to Life-Threatening Causes. American Journal of Roentgenology [Internet]. 2007 [Cited 2019 Jan 9]; 188: 1604-1613. Available from: <https://www.ajronline.org/doi/full/10.2214/AJR.06.1309>
- Cooke IJ; Okorji LM; Matulewicz RS; Oberlin DT; Helfand BT. Bladder Pneumatosis From a Catastrophic Vascular Event. Urology Case Reports [Internet]. 2016 [Cited 2019 Jan 9]; 58-60. Available from: <https://www.sciencedirect.com/science/article/pii/S2214442016300766?via%3Dihub>
- Korn A; Chiong BB; Lazar J. Benign pneumatosis intestinalis of uncertain etiology. Visual Journal of Emergency Medicine [Internet]. 2018 [Cited 2019 Jan 9]; (11) 82-83. Available from: <https://www.sciencedirect.com/science/article/pii/S2405469017302017>