Sign: “Gas in intestinal wall”- Pneumatosis intestinalis

Sinal: “Gás na parede intestinal” - Pneumatose intestinal

Thays Maria Lima Costa¹, Daniel Nóbrega da Costa², Gustavo Vilela³

Pneumatosis intestinalis is a radiological sign that represents the presence of gas between the parietal layers of a bowel loop. Although frequently related to the presence of a necrotizing condition of the bowel, it can be found in benign conditions, and is classified as primary or idiopathic (15% of cases) or secondary (85% of cases) (1).

In idiopathic pneumatosis intestinalis there are multiple thin walled cysts containing gas on the submucosa or subserosa of the bowel wall.

Secondary conditions are related to the interaction of factors, such as loss of mucosal integrity, changes in bacterial flora and increased intraluminal pressure. Among the causes of secondary pneumatosis intestinalis, intestinal obstruction, inflammatory bowel disease, necrotizing enterocolitis, ischemia or infarction, sepsis, neutropenia, chemotherapy, use of steroids and bone marrow or other organ transplants stand out (2).

The presence of pneumoperitoneum in cases of pneumatosis intestinalis may be due to the rupture of aired subserosa cysts, and are not necessarily related to intestinal loop perforation. The clinical picture is essential to characterize the cause of pneumoperitoneum related to pneumatosis intestinalis.

Computerized tomography imaging studies should be evaluated at different “windows”, because when the windows are more open they more easily show gas in the bowel walls.

REFERENCES