Pneumatosis Intestinalis in a Case of Acute Appendicitis

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A 17-year-old boy presented with a 2-day history of right quadrant abdominal pain. His abdomen was painful with tenderness in the low right quadrant. The abdominal ultrasound (US) was inconclusive because of increased gas interposition. Computed tomography (Fig. 1) revealed extensive pneumatosis of the ascending colon (arrows) plus signs of acute appendicitis and an appendicolith (arrowhead). After transumbilical laparoscopic-assisted appendectomy for perforated appendicitis, the patient was discharged on the 5th post-operative day and is doing well.

Pneumatosis intestinalis, defined as the presence of gas within the gastrointestinal wall, may be explained by bacterial transmural migration secondary to luminal infection. It is usually the signature of neonatal necrotizing enterocolitis, a potentially severe condition, but it may also be present in several diseases, such as rotavirus gastroenteritis, amenable to conservative approach. As our case illustrates, pneumatosis coli may be present in acute appendicitis, obscuring and/or delaying the US diagnosis of this condition.

PROTECTION OF HUMANS AND ANIMALS
The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association.

DATA CONFIDENTIALITY
The authors declare having followed the protocols in use at their working center regarding patients’ data publication.

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REFERENCES

Figure 1 – CT scan: pneumatosis of the ascending colon (arrows); appendicolith (arrowhead)

PATIENT CONSENT
Obtained.

CONFLICTS OF INTEREST
All authors report no conflict of interest.