

Title:

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Intestinal pneumatosis caused by cetuximab, a strange entity

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Dear Editor,

Intestinal pneumatosis is a rare condition characterized by the presence of gas in the wall of the gastrointestinal tract.

Its causes include factors induced by drugs, such as chemotherapeutics.

An example is cetuximab, a monoclonal antibody that inhibits the expression of angiogenic factors, used mainly in the treatment of advanced stages of colorectal and head and neck cancer.

Computed tomography (CT) is the diagnostic test of choice.

Although CT may demonstrate extraluminal air, surgery is rarely necessary due to the benign behavior of this pathology.

Case report

We present the case of a 74-year-old male with a history of arterial hypertension, ablated atrial flutter and prostate adenocarcinoma treated by radical prostatectomy in 2022.

He was diagnosed two months ago with squamous cell carcinoma of the oropharynx (T3N3M0) and treated with chemotherapy (cetuximab) and radiotherapy.

The patient was admitted to oncology due to oral intolerance secondary to glossitis and severe pharyngitis.

During his stay, he developed progressive anemia with no evidence of bleeding, so an abdominal CT scan with contrast was requested.

This showed extensive intestinal pneumatosis of the ileum with small bubbles of pneumoperitoneum around it (fig. 1 and 2).

Given the patient's good general condition and an unremarkable abdominal examination, non-operative management with antibiotherapy and close clinical follow-up was decided.

The patient presented a good clinical and analytical evolution.

A CT scan performed five days later confirmed the decrease in intestinal pneumatosis.

The patient was discharged seven days later.

Discussion

The pathogenesis of intestinal pneumatosis is not fully elucidated, although it is thought to involve a loss of intestinal mucosal integrity due to increased intraluminal pressure and gas production from bacterial overgrowth.

Predisposing factors include barotrauma, inflammatory bowel diseases, infections and certain drugs.

In this case, the only associated factor was treatment with cetuximab, of which there are few reported cases.

Its side effects include alterations in bowel habit, gastrointestinal bleeding, abdominal distension and, in rare cases, intestinal perforation.

Cetuximab-induced intestinal pneumatosis is extremely rare and its diagnosis is one of exclusion.

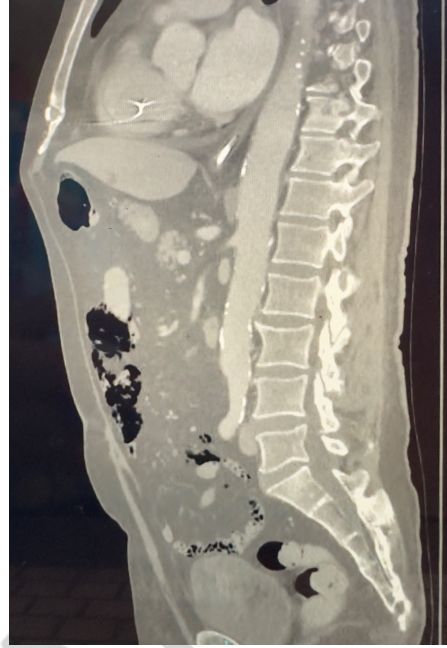
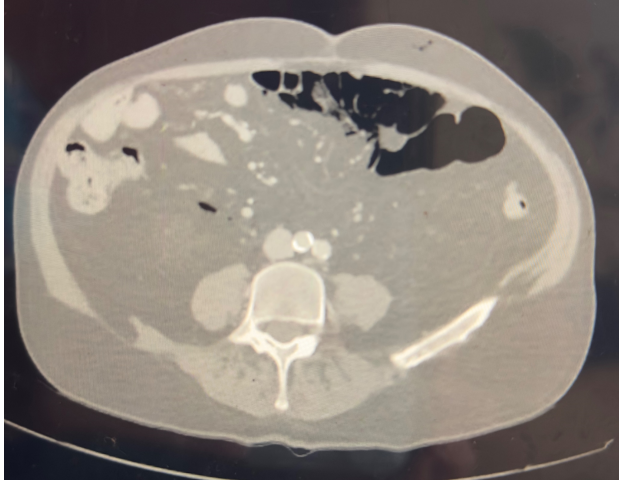
Its management is not clearly established due to the rarity and heterogeneity of its clinical manifestations.

According to the literature, conservative management should be considered in asymptomatic, hemodynamically stable patients with no signs of peritonitis.

The presence of persistent leukocytosis, elevated CRP, portal gas or signs of sepsis would justify exploratory laparoscopy/laparotomy to rule out complications.

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(fig 1 and 2: extensive intestinal pneumatosis of the ileum with associated pneumoperitoneum bubbles; findings suggestive of perforation).

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