Intestinal pneumatosis and pneumoperitoneum in an oncological scenario: a change of attitude

Key words: Bowel complication. Pneumoperitoneum. Intestinal pneumatosis. Molecular targeted therapy. Cancer.

Dear Editor,

The use of new chemotherapy agents has resulted in an undeniable change in anti-tumor treatment as well as a new spectrum of complications. The management of some complications such as asymptomatic pneumoperitoneum and intestinal cystic pneumatosis is controversial.

CASE REPORT 1

We present the case of a male aged 83 with stage IV lung adenocarcinoma, in progression after treatment with bevacizumab. A computed tomography (CT) scan showed pneumo and retropneumoperitoneum. The patient was asymptomatic with no clinical or analytical impact, therefore, an observational control and change of treatment to pemetrexed was decided upon. A cystic pneumatosis was found via a CT scan one month later that was associated with previous findings (Fig. 1). Due to the absence of symptoms, a conservative treatment schedule was selected and chemotherapy treatment was stopped. The patient's course was uneventful and was eventually discharged from hospital.

CASE REPORT 2

We present the case of a 74-year-old male with epidermoid carcinoma of the esophagus who had progressed after treatment with carboplatin-taxol. A pneumo and retropneumoperitoneum was identified via a CT scan. Due to the lack of symptoms, the patient was managed conservatively and chemotherapy treatment was interrupted. The patient had a favorable outcome, with radiological improvement in control CT.

DISCUSSION

Gastrointestinal toxicity manifested as pneumoperitoneum and cystic pneumatosis has been associated with molecular targeted therapy, mainly bevacizumab (1,2) and, in exceptional cases, with conventional chemotherapy (3,4). The etiopathogenic mechanism is not well understood due to the rarity of the condition. It has been hypothesized that the use of anti-angiogenic agents increases the permeability of the intestinal capillaries, allowing air to diffuse into the wall and then into the peritoneal cavity (2,5). In selected asymptomatic patients, this finding could be considered as a sign rather than a disease (4); therefore, a conservative non-surgical management is recommended. Chemotherapy treatment should always be stopped as the duration of treatment seems to be related to the development of these entities (1,5).
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