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Atypical image of pneumoperitoneum secondary to colon perforation

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Summary:

66-year-old female with a diagnosis of bilateral ovarian carcinoma with peritoneal carcinomatosis and liver metastases, who only had one cycle of chemotherapy, she could not be given other cycles because the side effects caused poor general condition. She was admitted due to intermittent vomiting developing for a week and severe heartburn, with the last stool two days before, presenting abdominal distension and lower abdominal pain, without signs of peritonism and without peristaltic sounds. After performing several complementary tests, the computed tomography scan showed a large amount of intra-abdominal air, it was thought to be a possible transverse colon volvulus, which caused extrinsic compression on the stomach. A colonoscopy was performed to try to devolvulate, without success, which led to the performance of laparotomy, with exit of pneumoperitoneum when opening the abdominal cavity, which was blocked by peritoneal carcinomatosis, observing a perforation of the colon at the splenic angle.

Case presentation:

66-year-old female with a history of hypertension and rhinoconjunctivitis. In January 2021, she was diagnosed with bilateral ovarian carcinoma with peritoneal carcinomatosis and liver metastases. She received a cycle of carboplatin and paclitaxel in February, unable to continue due to poor general condition. The patient was

admitted in March due to intermittent vomiting developing for a week and severe heartburn, with the last stool two days before. On examination, she presented abdominal distension and lower abdominal pain, without signs of peritonism and without peristaltic sounds. Abdominal X-ray showed an image of gas from the left hemidiaphragm to the pelvis and computed tomography scan showed a large amount of intra-abdominal air, it was thought to be a possible transverse colon volvulus, which conditioned extrinsic compression on the stomach. A colonoscopy was performed to try to devolvulate, without success, which led to the performance of laparotomy, with exit of the pneumoperitoneum when opening the abdominal cavity, which was blocked by peritoneal carcinomatosis with thickening of the greater omentum ("omental cake"). A perforation of the colon at the splenic angle was observed, performing segmental resection of the colon and colostomy. SARS CoV-2 infection with negative SARS CoV-2 PCR was also ruled out. The definitive diagnosis was, therefore, a perforation of the colon with secondary pneumoperitoneum, compressed by the presence of peritoneal carcinomatosis. The colonoscopy may have worsened the pneumoperitoneum, but it can be ruled out that it was the cause of the perforation, since the pneumoperitoneum had been detected before this test was performed.

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Figures:

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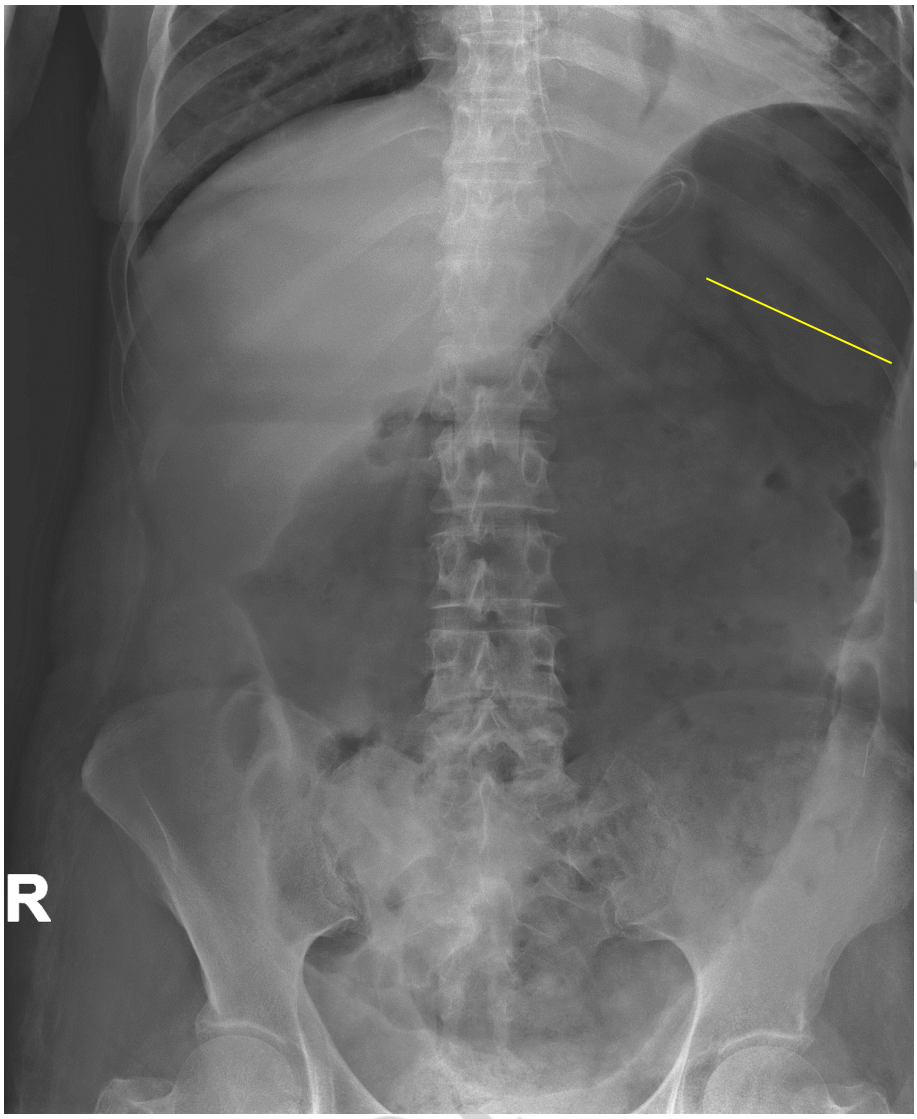

Figure 1

Abdomen supine view, showing a large amount of air in the abdominal cavity.

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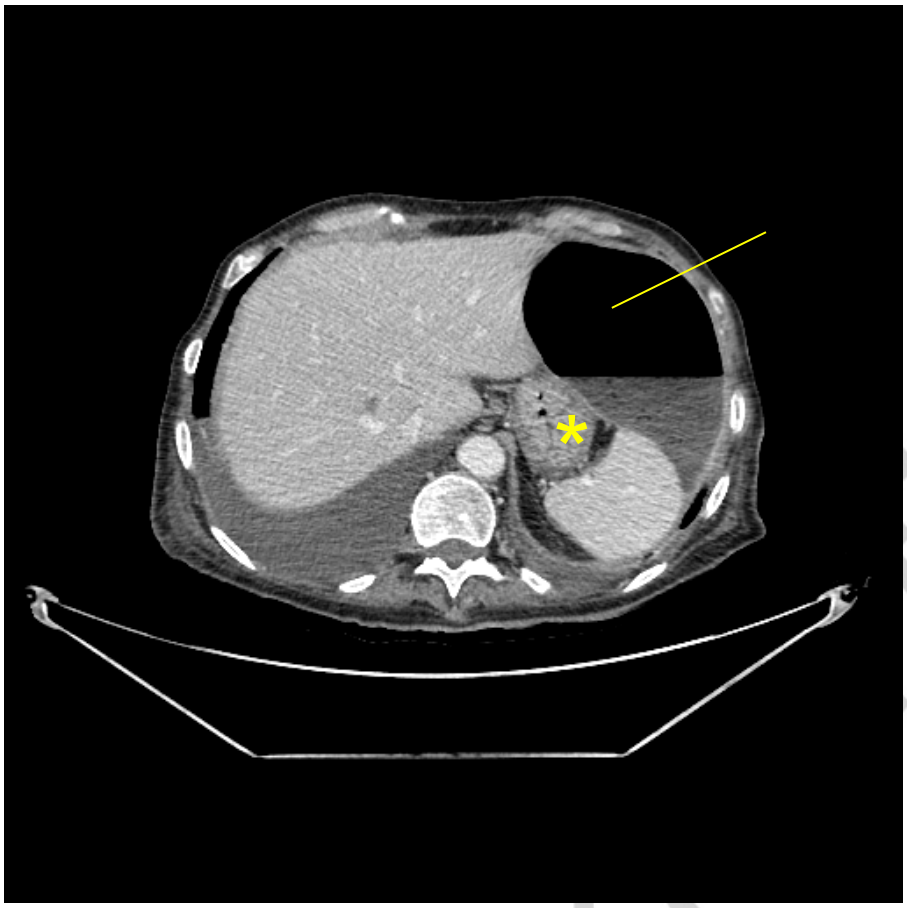

Figure 2

Computed tomography scan showing a large amount of air in the abdominal cavity with

extrinsic compression on the stomach.