

What's your diagnosis?

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Patient history

A 63-year-old male was treated with induction chemotherapy (TPF) for a locally advanced carcinoma of the oropharynx. On day 8 of the third cycle he presented with fever and diarrhoea. Clinical examination showed a hypotensive patient with severe epigastric pain. His lab results revealed neutropenia. A CT-scan was performed and the following images were yielded.

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The patient had a neutropenic enteritis (typhlitis) with intramural and portal air. Hepatic-portal venous gas (HPVG) is diagnosed by the appearance of branching lucencies within 2 cm of the liver capsule on plain abdominal radiography or CT. HPVG is most frequently associated with necrotic bowel, ulcerative colitis, intra-abdominal abscess, small bowel obstruction and gastric ulcers. The pathogenesis is not fully understood. Two sources of its origin have been proposed: (1) an escape of gas from increased pressure in the bowel lumen or in an abscess circulating into the liver or (2) the presence of gas-forming bacteria in the portal venous system and passage of gas into the circulation.² The treatment should be directed to the underlying disease which is also determining the prognosis. The overall mortality ranges from 40 to 75%.³

Blood cultures from the presented patient were positive for *Bacteroides fragilis*. Treatment with tazobactam/piperacillin and metronidazole was started and clinical improvement was observed. A control CT one month later showed complete resolution. Unfortunately, local tumor progression and lung metastasis was documented as well. After discussion with the patient, all antitumoral therapy was stopped and he died two months later in a palliative care unit.

Answer