



Continuous Positive Airway Pressure Therapy (CPAP) as a Cause of Gastroesophageal Pneumatosis Intestinalis after Whipple's Procedure

Huber M*, Weber M and Faes S

Department of Visceral, Thoracic, and Vascular Surgery, City Hospital Zurich, Switzerland

Clinical Image

A 65-year-old male with severe chronic obstructive pulmonary disease (GOLD Stage III) was diagnosed with adenocarcinoma of the ampulla of Vater and underwent Whipple's procedure. During the second night, he self-applied Continuous Positive Airway Pressure therapy (CPAP). He was complaining of severe left upper quadrant pain one hour later and a CT scan was obtained.

It showed pneumatosis of the stomach and the distal esophagus and aeroportia (Figure 1, 2). No sign of anastomotic leakage was seen. Gastroscopy was performed, showing no transmural ischemia of the stomach or gastro-jejunal anastomosis. After interdisciplinary discussion, a conservative management was initiated.

Antibiotics and antifungals were started, and the patient was closely monitored in the intensive care unit. In a CT scan five days later, pneumatosis had completely resolved.

During reconstruction in Whipple's procedure, a gastrojejunostomy is performed. We consider this anastomosis as possible entry point of pressurized air during CPAP therapy, resulting in intramural air and pneumatosis on imaging. CPAP after upper gastrointestinal tract surgery such as Whipple's procedure, bariatric surgery or esophagogastric surgery can have serious side effects and should be monitored closely.

OPEN ACCESS

*Correspondence:

Markus Huber, Department of Visceral Surgery, Thoracic and Vascular Surgery, City Hospital Zurich, Birmensdorferstrasse 497, 8063 Zurich, Switzerland, Tel: +41 44 416 43 26;

Received Date: 14 Jun 2024

Accepted Date: 28 Jun 2024

Published Date: 03 Jul 2024

Citation:

Huber M, Weber M, Faes S. Continuous Positive Airway Pressure Therapy (CPAP) as a Cause of Gastroesophageal Pneumatosis Intestinalis after Whipple's Procedure. World J Surg Surgical Res. 2024; 7: 1559.

Copyright © 2024 Huber M. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Figure 1: Pneumatosis of the stomach and the distal esophagus.



Figure 2: Aeroportia and pneumatosis of the stomach.