

Title: Pneumomediastinum Associated with Hyperemesis Gravidarum

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Abstract

Background: Pneumomediastinum is a rare complication of hyperemesis gravidarum. There are two main etiologies including spontaneous alveolar rupture and esophageal rupture. Both etiologies may present similarly with vomiting, chest pain, and possibly subcutaneous emphysema. Spontaneous alveolar rupture is more common and self-limiting, and can be treated symptomatically. Esophageal rupture, on the other hand, can lead to significant morbidity and mortality, and may require surgical intervention. We discuss two case reports and management considerations based on literature review.

Objective: To highlight a rare pathology of early pregnancy and how to appropriately manage these patients.

Methods: Thorough chart reviews were conducted to document our case reports. For our literature review, Pubmed articles were searched from years 1979 to 2022 containing the terms “pneumomediastinum” and “hyperemesis gravidarum,” resulting in a total of 10 published case reports.

Cases: Patient in Case 1 presented with intractable nausea, vomiting, and substernal chest pain. She was found to have pneumomediastinum and resolving esophageal tear, managed symptomatically. She also had a dilation and curettage for missed abortion. Patient in Case 2 presented with intractable nausea, vomiting, and subcutaneous emphysema. She was found to have complicated pneumomediastinum without an esophageal tear. She failed symptomatic management and required termination of pregnancy.

Conclusion: Intractable nausea and vomiting of early pregnancy associated with non-resolving chest pain should raise suspicion for pneumomediastinum. After initial diagnosis with chest x-ray, etiology should be promptly distinguished via contrast esophagram to ensure appropriate intervention. Uncomplicated spontaneous alveolar rupture can be managed conservatively whereas esophageal rupture may require immediate stabilization and surgery. Ultimate treatment may or may not necessitate termination of pregnancy.