Charles D. Collard, M.D., Editor

Acquired Bronchoesophageal Fistula and Gastroesophageal Junction Mass

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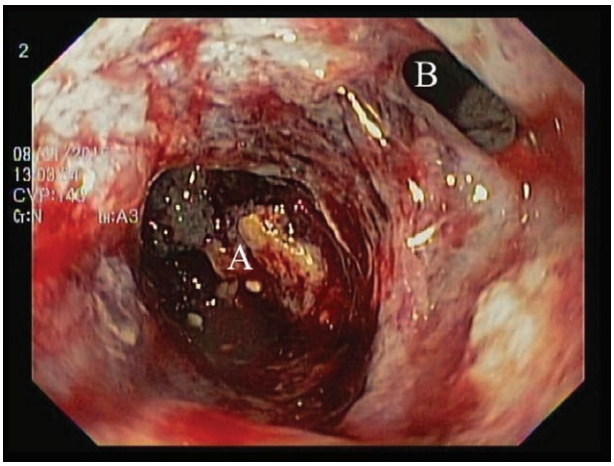

THIS image was obtained during endoscopy for palliative esophageal stenting under monitored anesthesia care. A large gastroesophageal junction mass (A) and orifice proximal to the right of this mass are shown in the accompanying image. The orifice is an acquired bronchoesophageal fistula (B) communicating with the right mainstem bronchus secondary to metastatic lung cancer.

This unprotected communication between the gastrointestinal tract and airway has significant anesthetic and airway management implications.[1–3] Aspiration of stomach contents is a constant risk.[1] Positive-pressure ventilation above the bronchoesophageal fistula is associated with the following[1–3]: a large airway leak, resulting in the inability to deliver projected tidal volumes; and esophageal and gastric insufflation, increasing an inherent risk of aspiration and potential pneumonitis.[1,2]

Maintenance of spontaneous ventilation and avoidance of positive-pressure ventilation until the fistula is isolated from the gastrointestinal tract can be advantageous.[1–3]

While there is no single best method to manage the airway in the presence of a bronchoesophageal fistula[1,3] and large gastroesophageal junction mass, insertion of a nasogastric tube preprocedure can vent any gas, minimize stomach inflation, and decrease the risk of esophageal rupture before fistula isolation.[3] Confirmation of proper placement by chest x-ray is important as an esophageal obstruction may push the nasogastric tube into the trachea. A left-sided double-lumen tube or a single-lumen endotracheal tube placed in the left bronchus are airway isolation options for a right mainstem bronchus fistula.[1,3] If stenting of the esophagus and trachea is planned, the trachea should be stented first as the esophageal stent may cause tracheal compression.[1]

Competing Interests

The authors declare no competing interests.

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