

Successful closure of a postoperative esophagobronchial fistula following esophageal resection using fibrin glue. [German]

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Abstract:

History and intervention: A 52-year-old female patient underwent open abdominothoracic cardia and esophageal resection with gastric transposition because of histologically diagnosed Barrett metaplasia with "high- grade" intraepithelial neoplasia (HGIEN) and parts of an invasive adenocarcinoma. The anastomotic insufficiency on the 10th postoperative day including an esophagobronchial fistula prompted to a subsequent surgical re-intervention with suture of the fistula, lavage and additional drainage, an endoscopic stenting of the fistula from esophageal site, as well as repeated (n = 22) bronchoscopic applications of fibrin glue (1-3 ml each) into the lumen of the fistula after each bronchoscopic lavage of the fistula until the complete closure was achieved. The changeful clinical course of 77 days on the surgical ICU was characterized by secondary complications such as pneumonia, mediastinitis and respiratory insufficiency with long-term artificial respiration and creation of a percutaneous dilatation tracheotomy. Conclusion: The application of fibrin glue can be considered a promising, minimally invasive therapeutic option in the management of postoperative fistula after esophageal resection, which requires expertise in decision-making and the finding-specific approach, in particular, if indicated initial steps of the sequential complication management such as surgical re-intervention and conventional endoscopic measures (stenting, Endo-VAC[-sponge]) do not provide great therapeutic potential any more due to the prolonged postoperative time course and the unfavorable local findings. In the presented case, modes of an assisted artificial respiration with low pressure and short phases of apnoe after fibrin glue application were the crucial predictions for an initial and favorable adhesion of this glue and finally for a

successful sealing resulting in a sufficient closure of the fistula.