



Author's Reply: Outcome of Self-Expanding Metal Stents in the Treatment of Anastomotic Leaks After Ivor Lewis Esophagectomy

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Firstly, we want to thank Plat et al. for their remarks on our study “Outcome of Self-Expanding Metal Stents in the Treatment of Anastomotic Leaks After Ivor Lewis Esophagectomy” [1].

To answer the first question, we introduced the different definitions of so-called technical success versus treatment success due to fact that leaks persistence can also occur despite correct stent position. It is well known that dislocation is one of the major complications during stent treatment either during application itself or during the postinterventional follow-up [2]. We found one patient within our cohort who showed a stent without any hint of dislocation during the postsurgical course. However, there was no tendency of healing under interventional therapy so that this patient finally underwent surgical reintervention. Therefore, the discrepancy was found between technical ($n = 50$) and treatment success ($n = 49$).

Referring to the second remark by Plat et al. [1], one patient with treatment success developed an esophagotracheal fistula during stent therapy (compare Figure 3 of the study). However, interventional stent treatment finally led to healing of the anastomotic leaks. That is why we do not see a contradiction to our established definitions. In our department, we perform endoscopy routinely when suspecting an anastomotic leak since this allows both diagnosis and intervention. Nevertheless, radiological procedures such as CT scan or esophagogram are additionally performed in order to detect further complications

such as intrathoracic abscess. Since there is ambiguous data considering esophagogram as the first-line procedure in the diagnosis of esophageal leaks, we do not refer to these methods in the first place [3–5]. We believe that our retrospective study demonstrates “actual situations” results considering the limitation of additional diagnostic procedures in patients with uncomplicated course after stent placement. We would believe that a standardized protocol of diagnostics and treatment in clinically suspicious patients after esophagectomy would lead to better results. This also depends on local circumstances like availability of endoscopy and endoscopic interventions, availability of radiological interventions and surgical volume of the hospital.

Our retrospective analysis considered almost a decade in which stent treatment was performed. During that time span, there were certain adjustments of this procedure resulting in the leak management. Addressing the issue of different type of stents, we performed a preclinical study testing the radial forces of different stent models and found large variation [6]. How these different radial forces would influence the outcome of stent treatment is not yet understood. Certainly, our clinicians are aware of other conservative endoscopic treatment strategies for anastomotic leak. However, in our opinion, no strategy would obviously show superior results so that this matter should be taken into prospective trials, where the conditions of treatment can be standardized.

As mentioned by Plat et al. [7], several reasons such as ischemia may lead to esophageal anastomotic leak.

In summary, we are grateful to initiate a constructive discussion considering this clinically highly relevant aspect of interventional complication management after oncological esophagectomy.

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