

A New Approach to Tense End-to-End Anastomosis in Primary Surgical Repair of Esophageal Atresia: Vascularized Pleural Flap

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Abstract

Background: Esophageal atresia (EA) is the most common congenital malformation of the esophagus. If the distance between the proximal and distal pouches is usually more than 2-3 cm, it is considered as long gap esophageal atresia (LGEA). In our study, it was planned to investigate the effect of the use of vascularized pleural flap (VPF) on postoperative recovery in cases with tense end-to-end anastomosis in the primary repair of LGEA.

Methods: The postoperative recovery period data of patients who underwent tense end-to-end anastomosis due to LGEA between 01/01/2016 and 01/12/2020 in our clinic were analyzed retrospectively.

Results: Between the specified dates, 37 patients were operated for EA. A tense end-to-end anastomosis was performed in 16 of 37 patients. In 5 of these patients, a VPF was placed on the anastomosis line. In the postoperative follow-up, no anastomotic leakage or anastomotic stenosis was observed in 5 patients who underwent tense anastomosis with VPF. In addition, it was observed that patients who underwent tense anastomosis with VPF were started oral nutrition earlier after surgery compared to patients without VPF.

Conclusion: The success of the technique we performed in 5 patients without any complications suggested that this technique could be used as a method in tense anastomoses. It was thought that oral nutrition was initiated early in patients using VPF, since there was no anastomotic leak and the surgeon relied on the presence of the VPF.

Key words: esophageal atresia, flap, long gap