THE ROLE AND SAFETY OF FEEDING JEJUNOSTOMY TUBES AFTER OESOPHAGO-GASTRIC CANCER RESECTION

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BACKGROUND

Feeding jejunostomy tubes (FJT) placed intra-operatively in patients undergoing oesophageal and gastric cancer resections are useful in providing early post-operative enteral nutrition. Their role is more vital if anastomotic leak occurs which can delay resumption of per-oral nutrition. However, FJT can cause complications which in turn can worsen patient outcomes.

AIM

Aim of this study was to evaluate the role and safety of FJT in oesophageal and gastric cancer resections.

METHODS

All patients who underwent an Ivor-Lewis oesophago-gastrectomy or a total gastrectomy and had FJT inserted during surgery, in a tertiary centre in the UK over a three-year period, were included. Patients were placed in two groups (Group A: Witzel tunnelled jejunostomy and Group B: Stamm jejunostomy). Data were analysed retrospectively to review FJT associated complications, anastomotic leaks from the cancer surgery and role of FJT when anastomotic leaks occurred.

Complications (Clavien-Dindo)	GROUP A (n=118) WITZEL Jejunostomy	GROUP B (n=89) STAMM Jejunostomy	P-Value
All	7 (5.9%)	8 (9%)	0.401
Class 1 and 2 (Minor)	4 (3.4%) - Feed related enteritis - FJT site inflammation (two cases) - Tube blockage	4 (4.5%) - Tube slippage - FJT site infection - Tube blockage - Feed related acute kidney injury	
Class 3 or above (Major)	3 (2.5%) - Jejunum infarction - Kinked tube (replaced radiologically) - FJT slipped (replaced radiologically + infection)	4 (4.5%) - FJT site leak (two cases) - FJT slippage (radiologically reinserted) - FJT related obstruction and peri FJT leak	

RESULTS

Of the 207 patients included, the overall complication rate from FJT was 7.2% with 2.9% complications being Clavien-Dindo grade 3 or above. There was no FJT related mortality. Group A (n=118) and Group B (n=89) were statistically similar with regards to age, sex, history of smoking, body mass index and preoperative co-morbidities. There was no statistical difference in complications between Group A and B (p=0.401).

Only 20 / 207 (9.6%) cases developed an anastomotic leak following cancer resection in this study making FJT insertion necessary and useful. However, in 7 out of these 20 (35%) cases where FJT was necessary to provide enteral nutrition, further complications were caused by FJT.

CONCLUSION

This study demonstrates that prophylactically inserted FJT are not without complications and the complication risk is similar irrespective of the technique used. In retrospect, FJT were truly needed in only 9.6% cases that developed anastomotic leak. With these results, routine use of prophylactic FJT during an oesophageal or gastric cancer resection is not recommended.