INTRODUCTION

Reconstruction of the pharynx after total laryngectomy is one of the challenging technical aspects of head and neck surgery .

The bulk of the surgical literature about laryngeal cancer is concerned with " cure rates " or five-year survival. While this is important, the five-year survival rate is only one measure of success of laryngeal cancer surgery .

Post-operative morbidity and mortality are also very important, and there has been relatively little discussion of these aspects in the literature .

The primary thing we wish to avoid after surgical treatment of cancer larynx, besides recurrence, is the development of pharyngeal fistula which is usually the single greatest source of increased morbidity. The stay in hospital is considerably lengthened by this complication. Lavelle and Maw (1972) noted that fistulae were responsible for prolonged hospitalization seven times as frequently as all other complications combined.

It is also very important that carotid artery rupture with death or ligation-induced hemiparesis is more liable to occur in cases of fistula formation (Horgan and Dedo,1979).

Fistulae also add an extra psychological burden for the patient, who often already has a tendency towards depression. Moreover, the training in oesophageal speech and the eventual post-operative radiation treatment are delayed. In some cases a second operation is necessary to close the pharyngeal defect.

The fact that the pharynx and the cervical oesophagus do not have a serous layer accounts for the slow healing of the pharyngeal suture line compared with an intestinal anastomosis.

The purpose of this thesis is to review our experience with fistulae following total laryngectomy in order to attempt to isolate causative factors and suggest preventive measures.