
Oesophageal replacement

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Reconstruction of the esophagus after resection or bypass of malignant or benign lesion has been a challenging surgical problem. A variety of techniques have been advocated. None has given completely satisfactory results. The stomach, jejunum, colon were all used for reconstruction of esophagus. The stomach is highly vascular and of adequate length reaching up to the pharynx, easily mobilised with absence of abdominal anastomosis and only single cervical anastomosis. The cervical anastomosis is better than intrathoracic one due to lower incidence of anastomotic fistula in cervical anastomosis. The stomach use has disadvantage of higher incidence of postoperative aspiration pneumonia which adds to mortality and an incidence of serious complications from reflux oesophagitis. Thus its use is not accepted in the patients with benign lesion and the use of colon is advocated. Some surgeons prefer the use of stomach in reconstruction of the esophagus in patients with malignant disease because this procedure is quickest and simplest, with single anastomosis needed to restore continuity of the gut. The use of the jejunum is unsatisfactory chiefly due to deficient blood supply after mobilization about 25% of the cases, failure resulted from unfavourable disposition of the vessels in the mesentery of the mobilized jejunal loop. The main indication for jejunal interposition is a short reconstruction especially at the cardia. The choice now restricted between the stomach and colon. The potential operative risks appear to be higher in colon interposition is due to the greater length and complexity of the procedure with three anastomosis. The left colon is preferred than right colon because the blood supply to the left colon is rarely prone to anatomic variation. The benign nature of colonic secretion probably explains the low incidence of anastomotic problems and freedom from the risk of postoperative oesophagitis and aspiration from regurgitation. For these advantages the left colonic interposition is a procedure of choice in the benign lesions. Because of recent advances in the microvascular anastomosis, a successful free intestinal autograft was reported and deserves renewed attention. The jejunum is preferred because harvesting the autograft is easier and the intraluminal flora are less hazardous. The use of an extracorporeal tube to restore alimentation may be useful in reconstruction of esophagus. Intubation is considered as being a safer procedure than palliative resection in patients unsuitable for curative treatment. One of the most dangerous complications is leakage from the suture line. Anastomotic leak is the main cause of mortality. Skin tubes, various intestinal conduits, and transposition of the stomach into the thorax have been used for esophageal replacement in children the colon continues to be the most widely used organ for esophageal replacement in children.