

### **Cervical Exenteration - Guidelines and Surgical Technique Principles**

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#### **Abstract**

*Introduction:* Neoplastic invasion of the structures of the cervical region originating from a malignant tumour developed in one of the viscera of the throat may benefit from cervical exenteration. Defined as resection of the hypopharynx, cervical oesophagus, larynx and cervical trachea, exenteration has limited indications and is mandatorily accompanied by digestive tube reconstruction. The aim of this article is to highlight the indication, surgical strategy and important surgical stages illustrated by images from personal professional experience.

*Materials and method:* Pharyngo-laryngo-oesophageal en bloc resection and radical cervical lymphadenectomy were followed by reconstruction via free jejunal transfer or colic pedicle grafting. Between 2000 and 2018 we have performed cervical exenteration in 25 patients with tumours originating in the pharynx, larynx or cervical oesophagus. In the cases of 5 patients in whom we did not obtain the oncological safety margin for oesophageal cancer we performed transhiatal pharyngo-laryngo-oesophagectomy. In these patients, we performed reconstruction of the oesophagus with colonic graft. In 20 cases we performed jejunal autotransplant.

*Results:* We recorded 4 perioperative deaths, due to major arterial vessel haemorrhage (1 case), after jejunal necrosis (2 cases), and mediastinitis after oesophageal stripping and colonic graft necrosis (1 case). One patient presented tumour recurrence at the level of the tracheal stump. Survival rate varied between 6 months and 4 years for the group of patients who presented for postoperative follow-ups.

*Conclusions:* Cervical exenteration remains an option for tumour recurrence after radiochemotherapy or for obstructive airway or digestive tract tumours. It can be burdened by complications difficult to treat. The surgical team has to adapt its initial surgical strategy to the reality of the surgical field, both in terms of exeresis and in terms of types of pharyngo-oesophageal reconstruction.

**Key words:** cervical exenteration, free jejunal transfer, esophageal squamous carcinoma