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Evolution In The Surgical Management Of Pharyngo-Oesophageal Tumours: Pharyngo-Laryngo-Oesophagectomy – To Be Or Not To Be?

Isolated tumours in the pharyngo-oesophageal (PO) region have traditionally been managed by upfront surgery followed by adjuvant radiotherapy if necessary. With the global trend towards organ-preserving therapy, upfront therapeutic chemo-radiotherapy has gained increasing popularity over primary surgical therapies. The role of surgery is being reserved for those with locally advanced disease, and as a means of salvage for persistent disease and recurrent disease post chemo-radiotherapy.

The aim of surgery is to achieve tumour resection and reconstruction in a single-stage operation with minimal morbidity, hospital stay, speech and swallowing impairment. Conventionally, surgical approach to PO tumours entails total pharyngo-laryngo-oesophagectomy (PLO). The entire length of the oesophagus is removed en-bloc with the PO tumour to make way for a stomach tube, which is pulled up to the neck via the orthotopic route for a single pharyngo-gastric anastomosis in the neck. However, PLO is a major undertaking with considerable operative morbidities and mortality. Functional outcomes are far from ideal with patients complaining of early satiety and reflux.

Nowadays, for patients with isolated PO tumours, we can resect the tumour via a trans-cervical approach – pharyngo-laryngo-cervico-oesophagectomy (PLCO). In removing the manubrium bone, the entire length of cervical oesophagus is exposed down to the level of the aortic arch, enabling resection of PO tumour under direct vision with adequate distal resection margins. Tumours with posterior tracheal wall invasion can also be catered for. Mediastinal lymph node dissection can be performed in case of nodal metastasis. Resultant defects in the pharynx, cervical oesophagus, trachea and overlying skin can be reconstructed by means of various regional or free flaps. Such an approach is less aggressive than PLO which in turn leads to lower operative morbidity, ICU stay, hospital stay and in-hospital mortality.

In the presence of comprehensive screening modalities and compliant patient follow-up, trans-cervical PLCO should be considered for isolated PO tumours involving the cervical esophagus. For PO tumours extending beyond the cervical esophagus, and for those with synchronous lesions lower down in the esophagus, conventional PLO is still indicated for surgical cure.