**Resectional Tactics in Head and Neck Surgery**

**Introduction**

I attended a course titled ‘resectional tactics in head and neck surgery’ at the Royal College of Surgeons, Edinburgh in April 2021.



The acquisition of a clear surgical margin (R0) has advantages in survival when treating head and neck cancer.1 The Scottish group, who run this course, have published their experiences in obtaining an R0 margin over the past twenty years. In 2001 they had a disappointing involved margin (R1) rate of 28%. This prompted a change in their philosophy, ‘shifting to an anatomical approach’. This reduced their R1 rate to 5% in 2009.2

I hoped that by attending this course I would gain some of the knowledge, experience and skills the Scottish group had acquired over the past two decades.

**Aims**

1. Practice the planning and execution of head and neck cancer resections based upon the clinical and radiological extent of the tumour in relation to local anatomical structures.
2. Gain skills in ‘access surgery’, allowing the safe delivery of a resection under direct vision.

**Experience**

This course was held in the anatomy department in the Royal College of Surgeons, Edinburgh. The ‘Resectional tactics’ module was delivered in the first 2 days and the remainder of the week comprised of a reconstruction module, which I also attended. There was a good mixture of didactic lectures, interactive discussions, anatomical demonstrations and ‘hands on’ cadaveric dissection. Teal embalmed cadavers were used for the practical elements of the course. The faculty were highly experienced and were from backgrounds in Ear Nose and Throat Surgery, Oral and Maxillofacial Surgery and Head and Neck Radiology.

The topics covered were organised anatomically, covering the following sites; the floor of mouth, tongue, retromolar region, mandible, parapharyngeal space, maxilla, skull base, larynx, parotid and thyroid. The relevant anatomy was highlighted from a clinical and radiological perspective. The use of access procedures such as the Webber-Fergusson with an anterolateral corridor approach and a lip split with a mandibulotomy were taught. The opportunity to immediately employ these techniques on a cadaver were educationally impacting.

In addition to improving my knowledge I also gained operative skills. One such skill was to find the maxillary artery, which has a variable course, and to gain control of it prior to performing a maxillectomy. Experiencing this on the cadaver will allow me to perform a safe, controlled maxillectomy under direct vision. Similar skills such as locating the lingual artery as it branches from the external carotid artery and placing a clamp on it prior to performing a tongue resection could be of benefit in controlling bleeding.

Using anatomical landmarks to guide the resection was another important theme throughout the course. Examples such as identifying the median fat plane of the tongue or the contralateral deep lingual artery and using these as a guide for the medial extent of a resection has obvious clinical benefits.

**Reflection**

Performing a safe, R0 resection accounting for the functional deficit of the individual requires knowledge, skill and experience. This cadaveric course offers the delegate an opportunity to acquire the knowledge and skill in a safe environment. The days were enjoyable, relaxed and great value for money. I would encourage anyone who has an interest in head and neck oncology to attend it.

In Wales the study budget is limited to £600 per year. I am grateful to BAOMS for their financial support of £300 which has helped to offset the cost of this course.

**References**

1. **Margins and survival in oral cancer**, Mitchell, D.A. et al, British Journal of Oral and Maxillofacial Surgery, Volume 56, Issue 9, 820 – 829
2. **Involved surgical margins in oral and oropharyngeal carcinoma—an anatomical problem?** cMahon, Jeremy D. et al, British Journal of Oral and Maxillofacial Surgery, Volume 49, Issue 3, 172 - 175