The Role of ENT Surgeons in Head & Neck Surgery

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Otorhinolaryngologists, frequently referred to as ENT surgeons, are physicians trained in the medical and surgical management and treatment of patients with diseases of the ear, nose, throat, and related structures of the head and neck. In Hong Kong ENT had a rather late start when compared to UK where ENT became a specialty in its own right in 1948 with the formation of the NHS. Here ENT was recognised as a specialty only in 1960 when the first ENT Consultant was appointed by the Hong Kong Government. The development however has since been rapid. Many ENT surgeons travelled widely to prominent centres overseas for study and training and brought back with them newly acquired knowledge and expertise. Centres of excellence were established providing service and training leading eventually to the establishment of the Hong Kong College of Otorhinolaryngologists.

Head & Neck Surgery presently forms a substantial part of the ENT training curriculum. It is perhaps more convenient for ENT surgeons to identify Head & Neck pathology as they are drilled in their every day work to look at the regions assessing appearance and function. Many took interest in the discipline, which has a plentiful of challenging open surgery, during training but one need to realise Head & Neck surgery involves a lot of anatomical knowledge, technical skill and a long learning period, and Head & Neck training programme therefore must be provided with sufficient manpower and financial support to be successful.

Head & Neck Surgery today is a specialty supported by ENT surgeons, Oral Maxillofacial Surgeons, General and Plastic Surgeons and on occasions Neurosurgeons and Cardiothoracic Surgeons. It embraces too wide a spectrum of benign and malignant conditions to be dealt with by any one single discipline. This across specialty cooperation must remain so and develop in the multi disciplinary direction without territorialism. There is no reason why tumour surgery cannot be taken by any speciality which is comfortable with a lesion in their region of interest. Nonetheless there is always the need for all interested parties to come together to discuss and reach consensus in the management of an individual patient in a multi-disciplinary approach for the benefit of the patient.

If we look at benign Head & Neck pathology, Juvenile Angiofibroma has come a long way from the time of Emil-Jean Gabriel Moure’s lateral rhinotomy approach with significant blood loss to the now endoscopic resection or mid facial degloving approach resection with preoperative embolisation. There is little doubt that here the ENT surgeons play an important role in the management of these difficult conditions. Benign salivary gland tumours are however often dealt with competently by ENT as well as General and Oral Maxillofacial surgeons with a head & neck interests. In the fifties and sixties, general surgeons had been doing most of the thyroid surgery due to historic traditions. However in the UK more and more ENT surgeons have been doing thyroid surgery over the last 20 years, and it is estimated that General Surgeons still perform the majority (83%) but ENT surgeons are performing significant numbers (17%) as well. Nowadays thyroid surgery remains a common interest of different surgical disciplines and it is certainly one of the ENT surgeon’s interest whether or not he is Head & Neck inclined. ENT surgeons have the added advantage and reassurance of being able to assess the vocal cords both before and after surgery and to manage vocal cord palsy by phonosurgery should the need arises.

In terms of Head and Neck cancers, ENT surgeons play an important role from the point of diagnosing the condition during examination to planning and executing treatment, followed by surveillance after treatment which is usually life long. In addition ENT surgeons, often working within a multidisciplinary team, can contribute to a number of adjunctive roles including airway management, voice management, visceral care and evaluation and treatment of cervical lymph nodes. His familiarity with the region clearly contributes well to the overall care of these cases.

One of the reasons why ENT surgeons have assumed a significant role in Head & Neck surgery is his familiarity with the larynx ever since Manuel Garcia discovered the use of the “laryngeal mirror”. Garcia himself was, interestingly, a Professor of Singing at the Paris Conservatoire who managed to view his own larynx using a dental mirror he bought for 6 francs, sunlight and the help of a reflecting mirror. In our locality laryngeal cancer is the commonest Head & Neck cancer aside from nasopharyngeal carcinoma and carries the best prognosis amongst head & neck cancers. Today ENT surgeons have the fibre-optic endoscope, videoscopes and stroboscopes which allow accurate physical and functional assessments before and after treatment. Endoscopes were devised primarily for the examination of the urinary bladder, vagina and rectum, but Chevalier Jackson expanded its use to examining the auditory meatus, nasal cavities, pharynx, larynx and oesophagus. Hopkins developed a fibre-optic system in
1954 and Ikeda later developed a flexible endoscope. With recent advances early cord cancers and dysplastic lesions can now be treated with laser surgery without much compromise to the voice, and laser resection together with selective neck dissection is now feasible with T1 and T2 carcinoma of the supraglottic and glottic larynx. Transoral laser laryngeal surgery has become incorporated into higher ENT training and also at the specialist level. From the days of Professor Theodore Billroth, a general surgeon who performed the first laryngectomy in 1873, and resection of early laryngeal cancer via laryngofissure by St Clair Thomson, UK and Chevalier Jackson of USA in the early 20th Century, this has been a remarkable step forward for ENT surgeons.

Management of carcinoma of the hypopharynx, retromolar trigone, floor of mouth, tongue and oropharynx, aside from resection with various selective neck dissection which are within the management scope of ENT and Head & Neck surgeons, requires in the majority of cases reconstruction. This is where our colleagues in Plastic Surgery have made a significant and better outcome in allowing a two team approach; with a fresh team performing the reconstruction and using a wider selection of appropriate reconstructive techniques including free tissue microvascular transfer. It is humbling to look back at a time when the doyens before us perform magnificent pieces of surgery like the Wookey’s lateral cervical flap, John Conley’s mid-cervical flap, staged or one stage pedicled cutaneous and myocutaneous flaps to close off the defects over half a century ago. Nasal tumours are fortunately rare so is squamous carcinoma of the ear. The technique of resection of these of these lesions are already well established within the specialty of ENT. Craniofacial resection are undertaken with the neurosurgeons and craniofacial resection has made a big improvement in the survival of patients with Olfactory Neuroblastoma. Again the importance of team approach is seen in those patients where the ENT surgeon has performed maxillectomy or mandibulectomy and our colleagues the Oral maxillofacial surgeons are there to provide the invaluable maxillofacial or prostodontic rehabilitation. Today an entire range of open and endoscopic skull base surgical techniques around the temporal bone, anterior, middle and posterior fossae are mature and highly developed and are now attracting young ENT surgeons to the area of skull base surgery. Under expert hands transnasal endoscopic resection of pituitary tumours and selected olfactory neuroblastoma by ENT surgeons together with our neurosurgical colleagues are feasible. The advent of osseointegrated titanium implants have allowed disfiguring facial defects to be camouflaged even if reconstruction is not possible. ENT surgeons are now well versed in placing osseointegrated implants to help reconstructing a facial defect, for prosthetic ears, or for bone anchored hearing aids (BAHA).

The modern day Head & Neck surgeons, irrespective of their background specialty which is of least significance, should have acquired the appropriate specialist training, the necessary operative skill and expertise and be fully integrated and comfortable with a multidisciplinary approach. ENT surgeons have the blessing and knowledge of working right in the heart of the region of Head & Neck pathology. They have to assume an important responsibility in the continuing development of this specialty in terms of surgery, functional rehabilitation and research alongside our interested colleagues of other disciplines. I believe this is the best way to improve the outcome for our Head & Neck cancer patients.

References
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