

Surgical Management and Outcome of Carotid Body Tumours

Y C Por,**MBBS*, D T H Lim,***FAMS, M Med (Surg), FRCS (Edin & Glas)*, M K Teoh,****FAMS, FRCS (Edin), ChM (Bristol)*,
K C Soo,*****FAMS, MD, FRACS*

Abstract

Introduction: Carotid body tumours are rare but are interesting in their manner of presentation and challenging with respect to surgical extirpation. They may present as a neck mass from which a bloody aspirate is obtained on fine needle aspiration. They are occasionally diagnosed only at the time of surgery, when one encounters the vascular tumour mass. **Methods:** We reviewed the results of 8 cases operated in our department over a 10-year period from 1989 to 1999. We evaluated in-hospital mortality and morbidity, as well as the long-term outcome especially with regards to functional disability. **Results:** Preoperative evaluation included angiography, computed tomography (CT) or magnetic resonance angiography. Operative technique involves good exposure, vascular control, identification and preservation of neurovascular structures and subadventitial tumour dissection. In all cases the vagus nerve was preserved, except in 1 case who had a malignant tumour and resection of the vagus nerve together with the accessory nerve and sympathetic chain. Two patients had unexpected hoarseness of voice postoperatively, 1 was due to permanent vagus nerve palsy and the other to transient vagus nerve palsy. One of them needed vocal cord medialisation and long-term tube feeding. One patient had bilateral tumours and developed a stroke after an operation on the second tumour. No patients exhibited local or metastatic disease during follow-up. There was no mortality in all cases. **Conclusion:** Although resection of the carotid body tumour is safe in experienced hands, long-term morbidity is still a significant problem and can be debilitating to the patient.

Ann Acad Med Singapore 2002; 31:141-4

Key words: Chemodectoma, Paraganglioma

* Medical Officer

** Consultant

*** Senior Consultant

**** Clinical Professor and Head

Department of General Surgery

Singapore General Hospital

Address for Reprints: Professor K C Soo, Department of General Surgery, Singapore General Hospital, Outram Road, Singapore 169608.