Poster No: PE065

International Surgical Week
The World's Congress of Surgery
isw2024.org
Kuala Lumpur, Malaysia
25-29 August 2024

BILATERAL CAROTID BODY TUMORS: A CASE REPORT FROM SURGEON'S PERSPECTIVE

Saravanan Kannairan (Registrar in General Surgery)[1], Khidhir Kamil (Medical Officer)[1], Kishen Raj A/L Chandrasakaran (General Surgeon)[1], Hisham Arshad bin Habeebullah Khan (General Surgeon)[1], Lenny Suriani Safri (Consultant in Vascular Surgery)[1], Mohamad Azim bin Md Idris (Consultant in Vascular Surgery)[1]

[1]Department of Surgery, University Kebangsaan Malaysia Medical Centre, Cheras, Kuala Lumpur, Malaysia

Introduction

Extra-adrenal paragangliomas are tumour of the paraganglia which are located within the paravertebral symptomatic and parasympathetic chains. Commonly, germline mutations play a role in the development of paraganglioma such as Von Hippel Lindau (VHL). Some of these paragangliomas may also be hereditary in nature or comprising part of genetic syndromes such as Multiple Endocrine Neoplasms Type 2 (MEN2). In this case report, we demonstrate a case of a patient with bilateral carotid body tumours (CBT) in which, a two-staged CBT excision was employed.

Discussion / Conclusion

This case report discussed on the approach of CBT excision in a two-staged setting in the case of bilateral occurrence. Conservative treatment can be opted for asymptomatic patients. However, it requires close follow-up as the majority of the patients may be symptomatic eventually.

Case Presentation

A gentleman with type 2 diabetes mellitus, hypertension and a history of bilateral adrenalectomy for phaechromocytoma, presented with bilateral painless neck swelling that persisted for 2 years, with no other associated symptoms. There was a palpable firm, fixed, round shaped mass, measuring 3 × 3 cm, with regular borders medial to the left stemocleidomastoid muscles (SCM) while over the right neck. A contrast-enhanced computerized tomography (CECT) of the neck showed bilateral enhancing mass at the both carotid bulbs, sandwiched between the external carotid artery (ECA) and the internal carotid artery (ICA) giving a positive Lyre sign. The CECT showed the left and right mass measuring 3 × 2.5 cm and 2 × 1.2 cm, respectively. The first surgery involved excision of the left CBT, while the second surgery involved resection of right CBT. Both surgeries for this patient were uneventful. During follow-up at 3 months post-surgery, the patient recovered well.

Table 1: Possible complications following CBT excision surgery

Early	Delayed
Wound infection	Pseudoneurysm
Bleeding	Chronic pain
Seroma	Hematoma
Arrhythmia	
Thromboembolism – stroke	
Injury to cranial nerves 9-11	

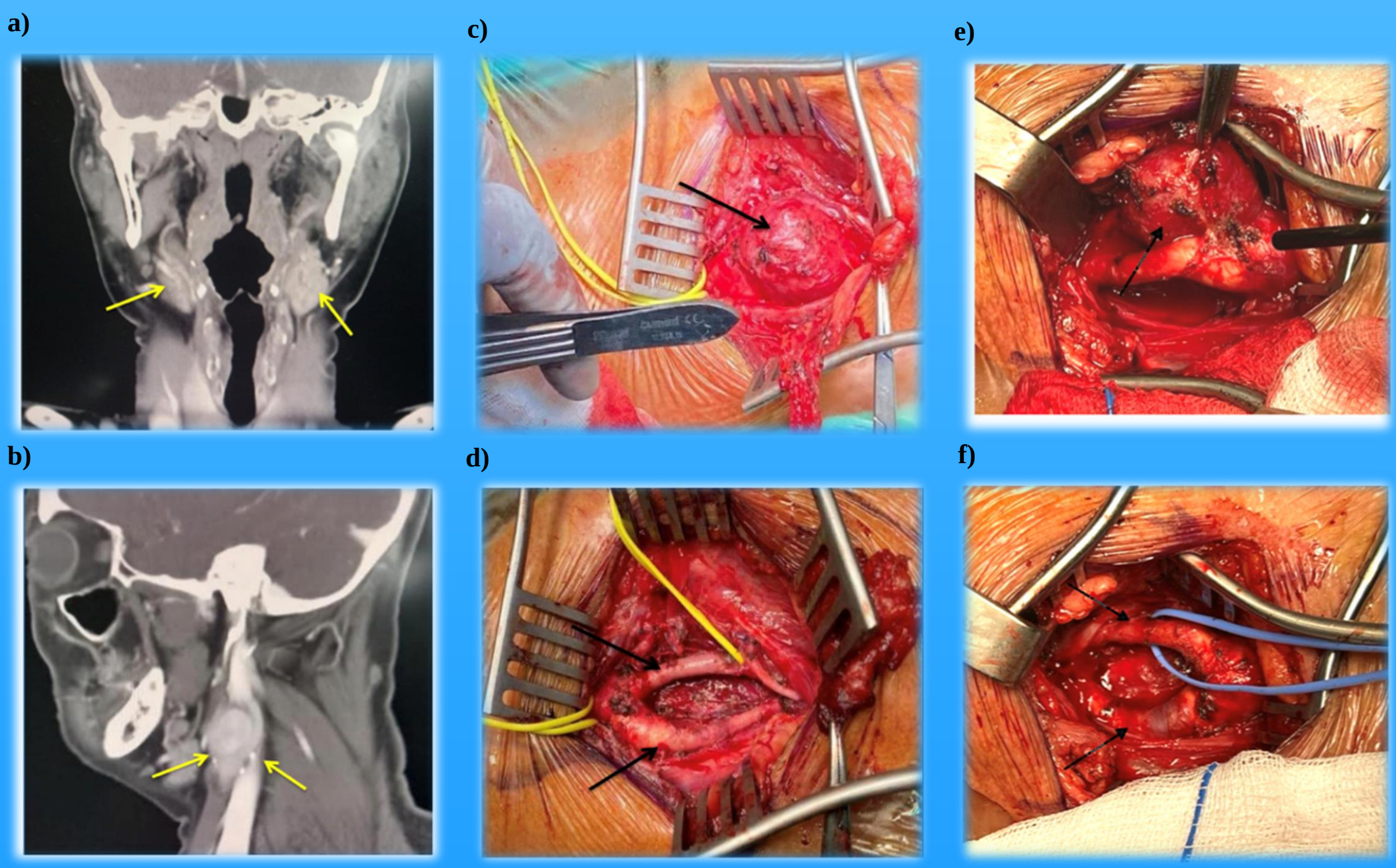

Figure 1: a) CECT neck (coronal view) view showing bilateral CBT (yellow arrows), b) Lyre sign. Tumour in between ECA and ICA (yellow arrows), First surgery resection of left CBT (black arrow) (c), with intact ECA and ICA post-operation (d), Second surgery resection of right CBT (black arrow) (e), with intact ECA and ICA post-operation (f)