

Spinal cord tumour presenting as neck pain

Introduction

Neck pain is a common presentation in general practice. The cause is usually musculoskeletal and self-limiting. Intraspinous tumour is an uncommon but important differential diagnosis. Early detection and surgical intervention can produce rewarding results. The authors present a case of intramedullary spinal cord ependymoma that presented with neck pain as the singular feature.

Discussion

Neck pain is a common presenting complaint in general practice, second only to lower back pain as the most common musculoskeletal complaint seen (Murtagh, 1999). The natural history in the majority of these cases is gradual

resolution of symptoms with conservative measures alone (Douglass and Bope, 2004).

Common causes of non-traumatic neck pain include spondylotic or degenerative radiculopathy, musculo-ligamentous strain and facet joint dysfunction. Spinal cord tumour is an uncommon but serious cause of acute neck pain. Primary spinal cord tumours are usually slow growing and cure is often possible with early detection. Intramedullary spinal cord ependymoma comprises the majority and most commonly occurs in the cervical region (Sloof et al, 1964). Surgical outcome directly correlates with the extent of disease and neurological function at the time of diagnosis (Schwartz and McCormick, 2000).

Owing to the insidious nature of intraspinal tumours, median time to diagnosis has been reported as 12.3 months, when significant neurological disability is present (Jellema et al, 2005). The commonest initial symptoms were reported as back and/or neck pain, radiation to the extremities, and gait disturbance (Jellema et al, 2005).

Conclusions

This case highlights the importance of maintaining a high level of suspicion when a patient presents with progressive non-traumatic neck pain. A complete history and full neurological examination is mandatory. Progressive pain unresponsive to analgesics; atypical distribution of pain; pain extending over several dermatomes; or unexplained motor-sensory deficits warrant urgent investigation. Sphincter dysfunction, sensory disturbances and tetraparesis or paraparesis are typically late findings (Jellema et al, 2005).

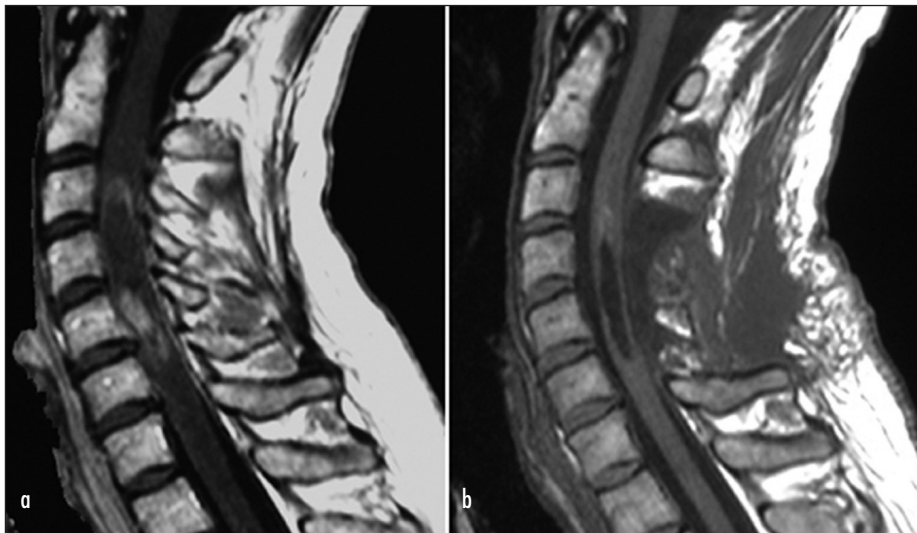
Magnetic resonance imaging is the investigation of choice. A high index of suspicion at the primary care level with urgent neurosurgical referral can avoid irreversible disability and produce rewarding outcomes as demonstrated by this case. **BJHM**

Case Report

In April 2003, a 48-year-old GP was admitted to the authors' hospital with severe neck pain. He had a 2-week history of progressively worsening neck pain without antecedent trauma or strain. Pain was initially relieved by paracetamol, but progressed to waking him from sleep and became continuous during the day. Physiotherapy and opiates did not alleviate symptoms. Power, sensation and sphincter functions were unaffected. After a further week of unremitting pain, neurosurgical referral was made.

A magnetic resonance imaging scan showed an intrinsic spinal cord tumour extending from C3 to C6 level (Figure 1). Urgent laminectomy and resection of tumour was performed. Complete excision was possible as the tumour had not infiltrated into surrounding normal cord. Pathology confirmed intramedullary ependymoma. After a short period in a spinal rehabilitation unit followed by regular outpatient physiotherapy the patient regained full function, resuming work, and was even able to participate in a local relay marathon 2 years later.

Figure 1. Magnetic resonance image showing (a) spinal cord tumour extending from C3 to C6 and (b) following complete resection.



- Douglass AB, Bope ET (2004) Evaluation and treatment of posterior neck pain in family practice. *J Am Board Fam Pract* **17**: 13–22
- Jellema K, Overbeeke JJ, Teepe HL, Visser LH (2005) Time to diagnosis of intraspinal tumors. *Eur J Neurol* **12**: 621–4
- Murtagh J (1999) *General Practice*. 5th edn. McGraw-Hill, Sydney
- Schwartz TH, McCormick PC (2000) Intramedullary ependymomas: clinical presentation, surgical treatment strategies and prognosis. *J Neurooncol* **47**: 211–18
- Sloof JL, Kernohan JW, MacCarty CS (1964) *Primary Intramedullary Tumours of the Spinal Cord and Filum Terminale*. Saunders, Philadelphia

Mr Ryan P De Freitas is Neurosurgical Senior House Officer and **Mr Kishor A Choudhari** is Consultant Neurosurgeon in the Department of Neurosurgery, Regional Neurosciences Unit, Royal Victoria Hospital, Belfast BT12 6BA

Correspondence to: Mr KA Choudhari