

# Late Metastatic Pontine Melanoma Presenting as Ataxia

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### Abstract

Ataxia was the only presenting symptom of a large pontine melanoma secondary in a 63 year-old male after five years of follow-up. Although the brain is a common site for melanoma metastasis, brainstem involvement is uncommon and its presentation with ataxia and no cranial nerve palsies is unusual.

## **Case Presentation**

A 63 year-old man presented with a 2 month history of insecure gait. There were no localising symptoms in regard to hearing, no headache, and he had not had vertigo. On examination he was fully alert and orientated. Audiometry showed a symmetrical noise-induced hearing loss. Eye examination with Frenzel glasses revealed no spontaneous nystagmus. Vestibulo-ocular(VOR) reflexes ,VOR suppression and a provocative positional tests were normal. Facial nerve function, facial sensation and tongue movements were normal. The Romberg test was normal. Tandem walking was performed with difficulty.

MRI scanning (Figure 1 and 2) revealed an enhancing mass  $(20 \times 19 \times 16 \text{ mm})$  to the right of the midline in the superior pons with surrounding oedema extending into the right cerebral peduncle, right middle cerebellar peduncle and dorsal pons, with distortion of the fourth ventricle.

## Previous history and clinical course

Five years previously histology on a small forearm skin nodule (removed as an ellipse) showed a malignant melanoma in the mid reticular dermis extending to the sub dermis and one transverse margin. One year prior a skin lesion was treated by cryotherapy. Staging CT scanning showed no metastases. Wide local excision with grafting and sentinel node removal was carried out. At annual oncology follow-ups for 5 years no recurrence could be detected. Further scanning showed small cerebral, lung and liver metastases. Due to increasing ataxia and slurred speech he was admitted for high dose dexamethasone and whole brain radiotherapy, but died 8 weeks after initial presentation.

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Figure 1: Sagital T1 weighted post gadolinium image showing a well defined enhancing pontine mass.



Figure 2: Axial image showing the pontine mass to the right of the midline.

# **Discussion**

Brain metastases are the most common cerebral tumours. The most common primary tumour sources are lung and breast [1-3]. Five to ten percent are from cutaneous melanoma [4]. The distribution of metastases closely follows the volume of the affected in the order cerebrum, cerebellum and brainstem [2] (approximately 10% [3]). In

a large series of brain stem metastases [3] 9% were from melanoma. The most common symptoms were hemiparesis and cranial nerve palsies, with ataxia being uncommon. Ataxia is more likely to be a presentation of cerebellar metastases, but in this patient resulted from involvement of cerebellar connections.

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