

# MELANOMA WITH SYMPTOMATIC BRAIN METASTASES: TWO CASE REPORTS

WONG Robin, CHAN Yuen Chung David, CHEUNG Yuk Hong Eric, NG Yuen Ting, WONG Kwok Chu George

Division of Neurosurgery, Department of Surgery, Prince of Wales Hospital, The Chinese University of Hong Kong, Hong Kong

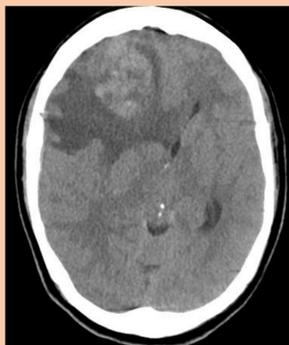
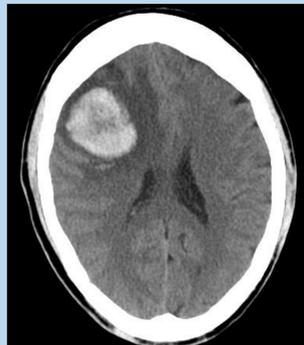


## INTRODUCTION

- Melanoma with brain metastases is rare in our locality.
- The pathognomonic intra-op finding of dark pigmented melanotic deposits is particularly striking (Fig. 1)
- We reviewed patients with melanoma brain metastases to highlight the clinical presentation and disease course of this unique condition.



Fig. 1: Melanotic deposits

	Case 1: 55/F, Melanoma of Uterine Cervix T4bN1b	Case 2: 56/F, Anal Melanoma T4bN2b, APR done
Presentation	<ul style="list-style-type: none"> <li>Presented 1 month after initial diagnosis</li> <li>Sudden episode of coma after vomiting. GCS 6 &amp; blown right pupil.</li> </ul>	<ul style="list-style-type: none"> <li>Presented 2 years after initial diagnosis</li> <li>Collapsed at home with left-sided weakness.</li> </ul>
Imaging	 <p>CT Brain:</p> <ul style="list-style-type: none"> <li>Multiple heterogenous lesions in bilateral frontal lobe, largest right frontal lesion ~4.9cm.</li> <li>Vasogenic edema with patchy hyperdensities suggest tumor hemorrhage.</li> <li>Mass effect, early hydrocephalus.</li> </ul>	 <p>CT Brain:</p> <ul style="list-style-type: none"> <li>Multiple hyperdense lesions in right frontal lobe, largest lesion ~4.2cm</li> <li>Suggest hemorrhagic brain mets with moderate perilesional edema. Meningeal deposits were seen.</li> <li>Mild mass effect</li> </ul>
Treatment	Emergency craniotomy for excision of brain tumor + Dexamethasone + Adjuvant WBRT	
Intra-op findings	<ul style="list-style-type: none"> <li>Thin layer of SDH noted</li> <li>Blackish soft tumor with moderate vascularity excised, melanin deposits noted.</li> <li>Pathology: melanoma (BRAF -ve)</li> </ul>	<ul style="list-style-type: none"> <li>Hematoma with dark pigmentation at sulci.</li> <li>Dominant hemorrhagic pigmented nodule at subcortical region of cavity excised.</li> <li>Pathology: melanoma</li> </ul>
Progress	<ul style="list-style-type: none"> <li>GCS recovered to full on discharge with no neurological deficit</li> <li>In view of metastatic disease and poor prognosis, patient left HK for treatment in her home country.</li> </ul>	<ul style="list-style-type: none"> <li>Post-op improved hemiparesis.</li> <li>PET-CT: local recurrence at anus, metastases to lung.</li> <li>Admitted for confusion 2 months later, CT Brain showed increased metastatic nodules.</li> <li>Oncology: not for chemo/RT.</li> <li>Succumbed 3 months after initial presentation to us</li> </ul>

## DISCUSSION

- Cervical and anal primaries belong to the rarer subtype of mucosal melanoma seen more in Asians, in contrast to the subtype of cutaneous melanoma widespread in Caucasians.<sup>1</sup>
- Risk factors for brain metastasis: male gender, mucosal or acral lentiginous or nodal subtypes, thick or ulcerated neoplasms, and stage IV disease.<sup>2</sup>
- Frequently develop tumor hemorrhage which correspond to rapid symptom onset, and patchy hyperdensities on plain CT; tumor degeneration and necrosis are rarely seen.<sup>3</sup>
- Surgery is the mainstay of treatment especially when symptomatic, while the survival benefit of WBRT is controversial.<sup>4</sup>
- Routine CNS imaging has no purpose in asymptomatic patients with regional nodal involvement.<sup>5</sup>

## CONCLUSION

Melanoma with brain metastases generally presents with symptomatic tumor hemorrhage and poor prognosis.

## REFERENCES

- Chi Z, Li S, Sheng X et-al. Clinical presentation, histology, and prognoses of malignant melanoma in ethnic Chinese: a study of 522 consecutive cases. BMC Cancer. 2011 Feb 25;11:85.
- Sampson JH, Carter JH Jr, Friedman AH et-al. Demographics, prognosis, and therapy in 702 patients with brain metastases from malignant melanoma. J Neurosurg. 1998 Jan;88(1):11-20.
- Ginaldi S, Wallace S, Shalen P et-al. Cranial computed tomography of malignant melanoma. AJR Am J Roentgenol. 1981;136 (1): 145-9.
- Sloan AE, Nock CJ, Einstein DB. Diagnosis and treatment of melanoma brain metastasis: a literature review. Cancer Control. 2009 Jul;16(3):248-55.
- Wong SL, Faries MB, Kennedy EB et-al. Sentinel Lymph Node Biopsy and Management of Regional Lymph Nodes in Melanoma: American Society of Clinical Oncology and Society of Surgical Oncology Clinical Practice Guideline Update. Ann Surg Oncol. 2018 Feb;25(2):356-377.

