

Clinical Image

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Cavernous sinus syndrome secondary to pituitary apoplexyKyle Wong^{1*}; Daniel Brungs²¹Medical Oncology Registrar, Wollongong Hospital, New South Wales, Australia.²Medical Oncologist, Wollongong Hospital, New South Wales, Australia. Graduate School of Medicine, University of Wollongong, Australia.***Corresponding Author: Kyle Wong**Medical Oncology Registrar, Wollongong Hospital,
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Description

A 64-year old woman with metastatic gastric adenocarcinoma and recurrent pituitary macroadenoma presented with a one day history of headache and vomiting. She was diagnosed with small pulmonary emboli one week prior and was treated with therapeutic enoxaparin at 1 mg/kg BD.

On exam she had a left sided ptosis of the eyelid, inability to move her left eye in all four directions and reduced sensation overlying her left forehead. She had diplopia on horizontal and vertical gaze testing. This was consistent with an oculomotor (III), trochlear (IV), ophthalmic branch of the trigeminal (V1) and abducens (VI) nerve palsy.

Magnetic resonance imaging scan of the head demonstrated a large sellar and parasellar mass lesion with signal intensity consistent with subacute haemorrhage peripherally and acute haemorrhage centrally (red arrow). A diagnosis of cavernous sinus syndrome secondary to pituitary apoplexy was made.

Cavernous sinus syndrome is characterised by ophthalmoplegia, Horner's syndrome and sensory loss of the trigeminal nerve [1]. There are numerous aetiologies including infectious, inflammatory, vascular and neoplastic [1,2]. Pituitary apoplexy describes pituitary cellular destruction secondary to haemorrhage or ischemia occurring within the normal pituitary gland or into a pituitary adenoma [3]. It can present with a range of symptoms including headache, visual dysfunction and acute

adrenal insufficiency with hypotension and shock [3]. Management of pituitary apoplexy includes stress dosing of hydrocortisone, management of pituitary hormone excess or deficiency and in some cases, resection of the pituitary gland [4].

Given our patient's advanced cancer she was managed conservatively without neurosurgical intervention. She was commenced on thyroxine and stress steroids for her hypopituitarism. Balancing the risks of her pituitary haemorrhage and treatment of her pulmonary emboli, her enoxaparin dose was reduced to 40 mg daily.

References

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Figure 1: Left sided ptosis secondary to cavernous sinus syndrome.

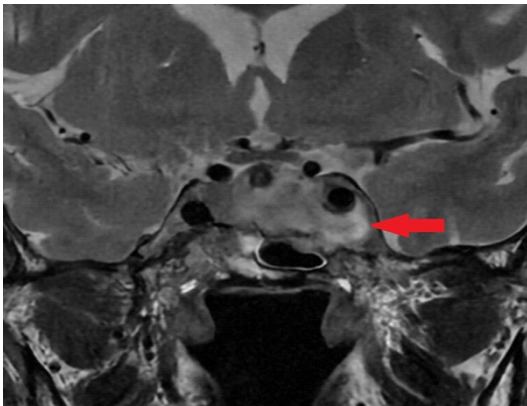


Figure 2: Large sellar and parasellar mass lesion demonstrating pituitary haemorrhage.