

[ PICTURES IN CLINICAL MEDICINE ]

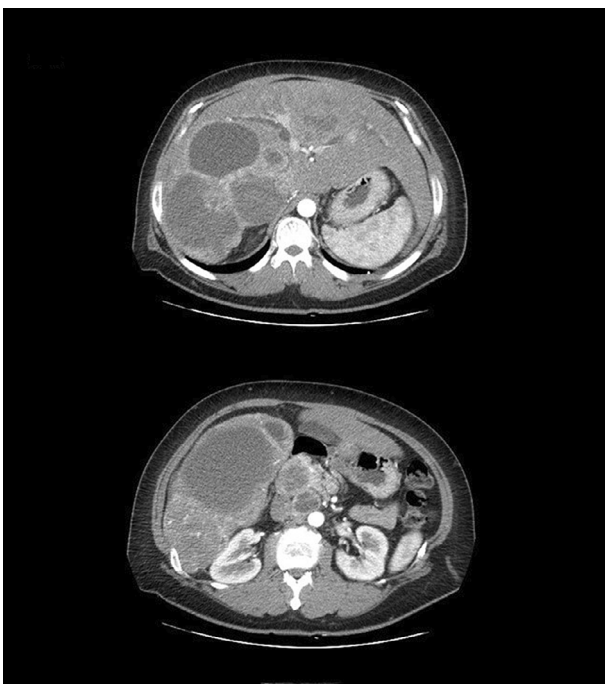
## Unilateral Ptosis Caused by Pancreatic Neuroendocrine Tumour Metastases

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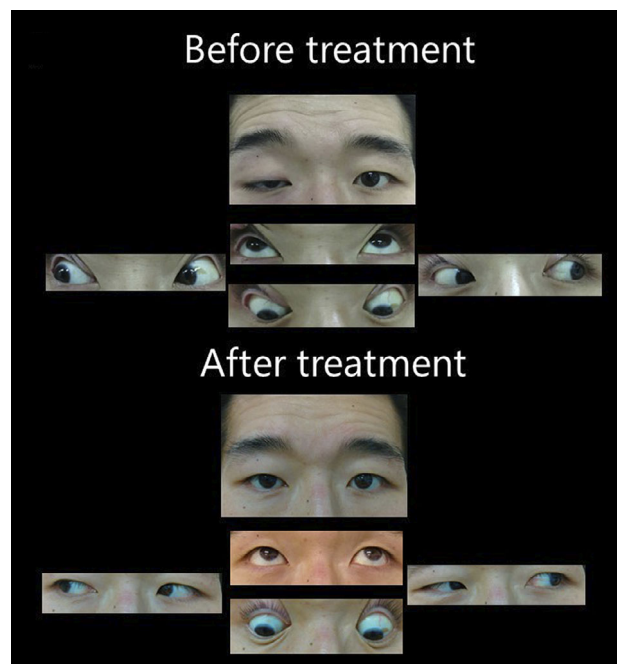
**Key words:** pancreatic neuroendocrine tumour, orbital extraocular muscle, metastases, ptosis, unilateral

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**Picture 1.**



**Picture 2.**

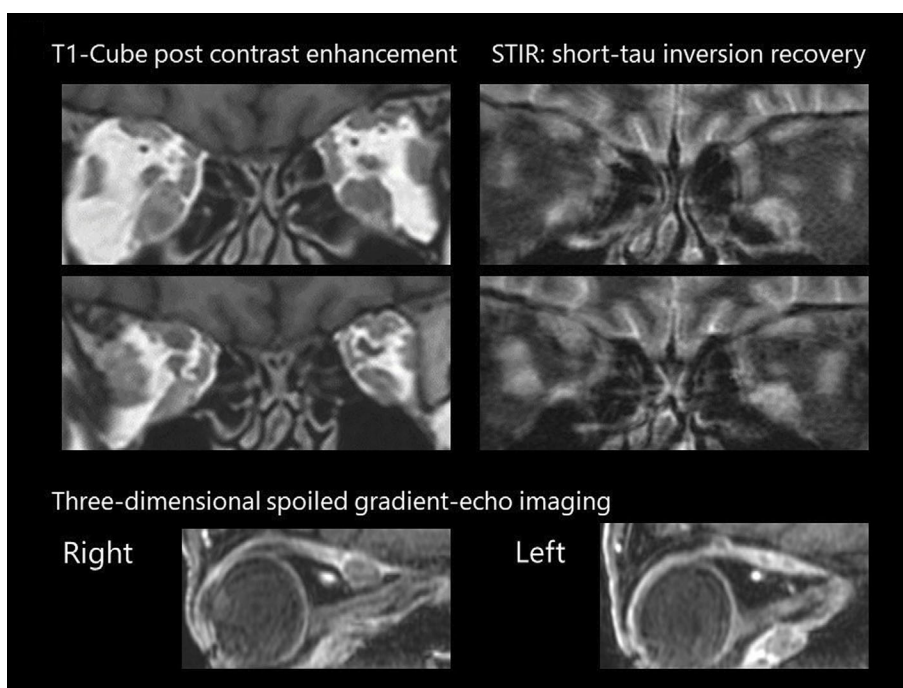
A 39-year-old man who had been diagnosed with a non-functional pancreatic neuroendocrine tumour (PNET) with multiple liver and lymph node metastases 6 years earlier (Picture 1) presented with a 2-week history of right ptosis. A neurological examination revealed right pupil-sparing ptosis without restriction of extraocular muscles (EOMs) (Picture 2). The bilateral visual acuity and bilateral light reflexes were normal. Laboratory studies for diabetes mellitus, myasthenia gravis, IgG4-related disease, and hyperthyroidism were negative. Magnetic resonance imaging with contrast enhancement showed enlargement of multiple EOMs, in-

cluding the right levator palpebrae superioris muscle (Picture 3). The oculomotor nerve was uninvolved. The provisional diagnosis was orbital EOM metastasis from PNET. After radiation therapy (30 Gy) to the bilateral EOMs, his ptosis resolved completely (Picture 2). An important differential diagnosis for acquired restrictive ophthalmopathy is metastatic tumour (1). PNETs are uncommon and rarely metastasize to the orbital EOM or present with pain, proptosis, vision impairment, and ptosis (2). This patient had only unilateral ptosis without any other eye symptoms. Metastatic tumours should be considered a possible cause of ptosis,

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**Picture 3.**

even if patients with cancer have only ptosis.

**The authors state that they have no Conflict of Interest (COI).**

### References

1. Leigh RJ, Zee DS. The neurology of eye movements. 5th ed. Oxford University Press, USA, 2015.

2. Matsuo T, Ichimura K, Tanaka T, Takenaka T, Nakayama T. Neuroendocrine tumor (carcinoid) metastatic to orbital extraocular muscle: case report and literature review. *Strabismus* **18**: 123-128, 2010.

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