

Panhypopituitarism secondary to compression by bilateral “kissing” internal carotid artery aneurysms.



Harriet Daultrey, Andy Smith.
Princess Royal Hospital. Brighton & Sussex University Hospitals. NHS Trust



Introduction

We describe a 91 year old woman who presented to hospital with transient loss of consciousness resulting in facial trauma. In the preceding 6 weeks she described 2 similar episodes of loss of consciousness and general malaise. She had a past medical history of pulmonary hypertension secondary to recurrent pulmonary emboli. Relevant medication included furosemide 20mg od and life-long warfarin.

Examination findings

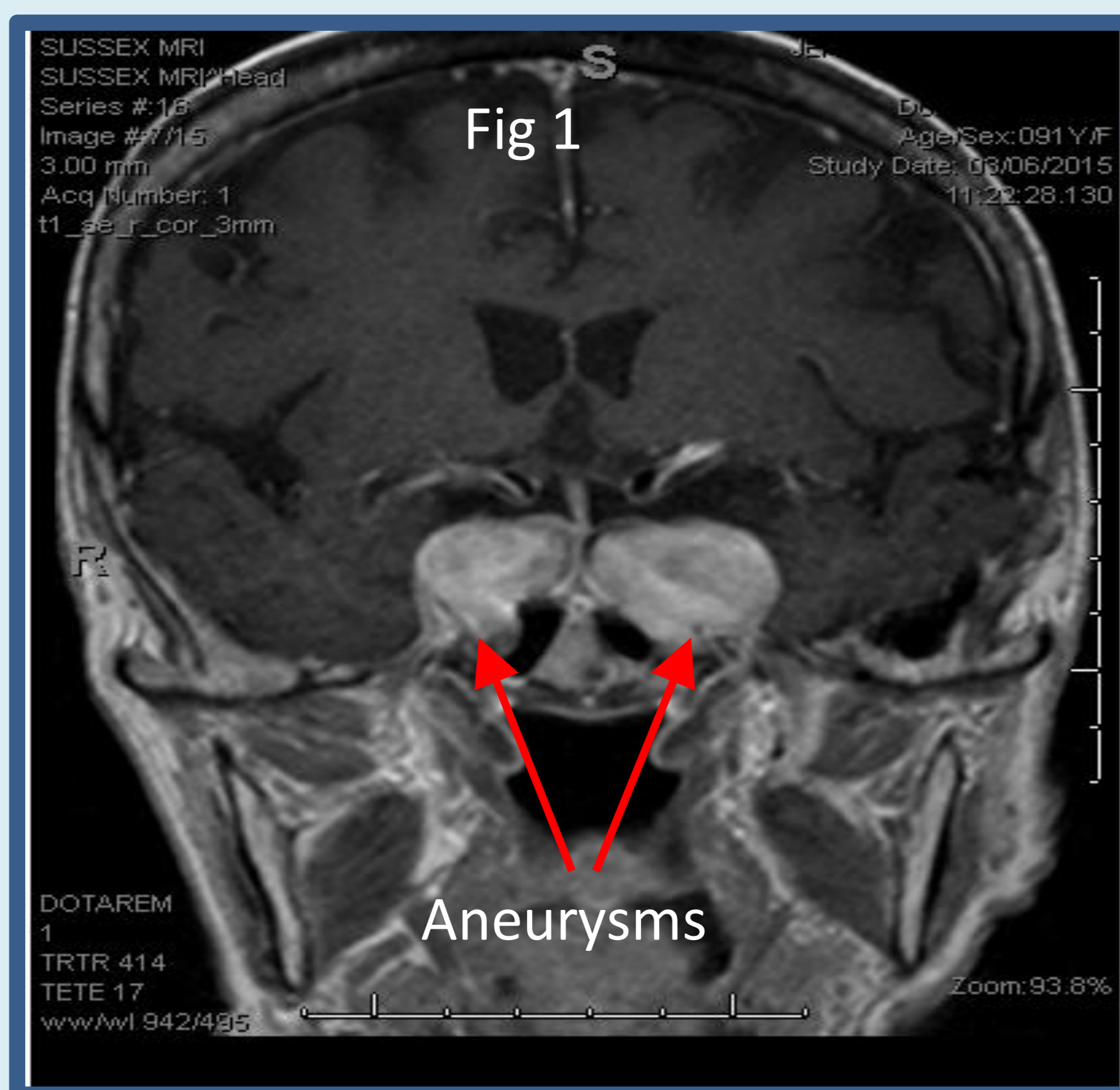
She had significant orbitofrontal bruising and was noted to be hypotensive with a drop in systolic blood pressure of 50mmHg on standing. Routine investigations revealed a hypotonic hyponatraemia of 126mmol/L with a normal serum potassium and urea concentration.

Imaging

The contrast enhanced T1 weighted MRI (fig 1) shows bilateral carotid artery aneurysms abutting in the midline. The central pituitary gland is difficult to delineate clearly in between.

Biochemistry

	Result 9am.
Cortisol	145 nmol/L (171-536)
LH	<0.1 iu/L (2.4-13)
FSH	<0.1 iu/L (3.5-13)
Prolactin	6312 miu/L (102-496)
TSH	1.46 mu/L (0.3-4.2)
FT4	7.2 pmol/L (12-22)
FT3	3.0 pmol/L (3.1-6.8)
IGF-1	11.0 nmol/L (4-22.8)



Reconstructed MRA images (fig 2 and fig 3) further show the aneurysms which were partially thrombosed.

Outcome

The patient was commenced on replacement dose hydrocortisone with rapid resolution of her hyponatraemia and improvement in her constitutional symptoms. Levothyroxine was subsequently added and titrated appropriately. A conservative approach was taken with respect to the carotid aneurysms and she continues to be followed up in endocrine clinic. Her quality of life has significantly improved on hormone replacement allowing her independence to return.

Discussion

Aneurysms are a rare cause of panhypopituitarism, a prevalence estimated at 0.17%¹, of this the majority reported in the literature are unilateral aneurysms making the case we report here more unique.

Reference – 1) Hashmati, H. Fatourechi, V. Dagam, H. Piepgras, D. 2001. Hypopituitarism caused by intrasellar aneurysms. Mayo Clinic Proceedings. Vol 76. pp789-793