

Hypopituitarism with visual field loss is not always an adenoma

Dr U Farooq; Dr U Raja; Dr A Basu : Endocrine Department, City Hospital Birmingham

Society for Endocrinology

SOCIETY FOR ENDOCRINOLOGY
BES 2013

18 - 21 March 2013

Sandwell and West Birmingham Hospitals **NHS**
NHS Trust

Introduction

A biochemical profile of an underactive pituitary gland allied to visual field loss is commonly due to an underlying adenoma

We report a case where such a clinical picture was found but imaging/biopsy revealed a different cause

Case Report : History

A 52-year-old Indian male was referred by his GP to an endocrine outpatient department with:

- Reduced visual acuity
- Dysequilibrium

Past medical history included hyperlipidaemia, allergic rhinitis and depression

Case Report: Examination

Examination revealed a bitemporal hemianopia but an absence of any focal neurological signs

Case Report : Investigations

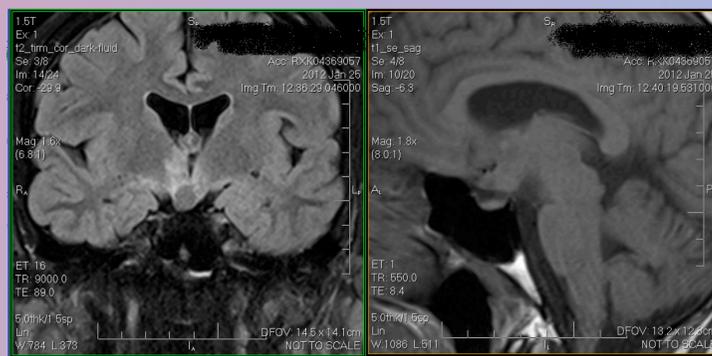
Clinical Chemistry:

- Free T4 6 pmol/L
- TSH 0.26 mIU/L
- Testosterone nul<0.1 ng/mL
- Prolactin 885 mu/L
- IGF-1 6.0 nmol/L

The above biochemistry is representative of hypothalamo-pituitary insufficiency with possible disconnection hyperprolactinaemia

MRI Head:

- Large ill-defined mass involving optic chiasm : 3.1 x 2.7 x 2.3 cm
- Pituitary normal
- Conclusion: possible optic nerve glioma - confirmed on histology



Case Report : Management

Started on replacement therapy with L-thyroxine, hydrocortisone and testosterone

Cerebrospinal fluid culture was negative for Mycobacterium Tuberculosis despite raised protein level of 0.98 g/L

Discussion

Gliomas of optic pathway can be split into two broad groups:¹

- Relatively benign optic nerve gliomas which usually occur in children
- Malignant optic glioma which usually occur in adults

Histology is typically of a low-grade astrocytoma²

This case demonstrates an uncommon albeit important cause of hypothalamo-pituitary dysfunction due to extrinsic compression of pituitary gland

Visual loss was due to intrinsic disease of optic nerve rather than external compression as seen with pituitary macroadenomas

Whilst all cases of pituitary failure require replacement therapy initiated by endocrinologists, there are some cases where the underlying pathology lies outside the pituitary gland and hence multi-disciplinary clinical input may be necessary

References

¹Dario A Ladini, Cerati M, Marra A. Malignant optic glioma of adulthood. Case review of literature. Acta Neurologica Scandinavica 100(1999):350353

²Kingston JE, Hawkins MM, Draper GJ et al. Patterns of multiple primary tumours in patients treated for cancer during childhood. Br J Cancer 1987;56:331-338