

One year pituitary function follow-up in survivors of severe brain injury presenting at a regional neurosurgical centre.

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Introduction

- 5% of traumatic brain injuries are severe (NICE)
- 30% develop hypopituitarism 3 to 12 months later i.e.
 - Human growth hormone deficiency (the most common)
 - Hypocortisolism / Hypothyroidism / Hypogonadism
 - Diabetes Insipidus

Currently there are no UK guidelines to advise on the follow up of such patients

Patients

Individuals with severe head injury admitted to Hurstwood Park Neurosurgical Centre between 1st January 2010—31st December 2012
Severe head injury defined as GCS of 8 and below

Methods

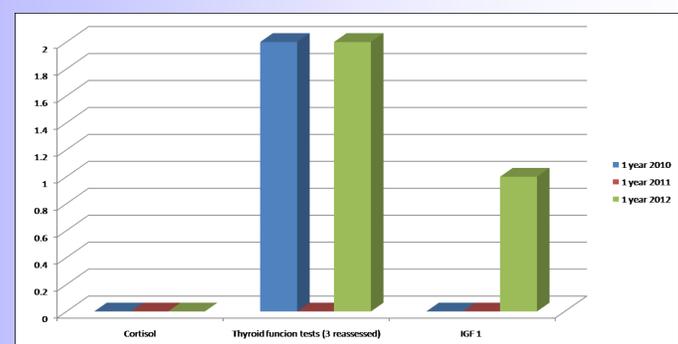
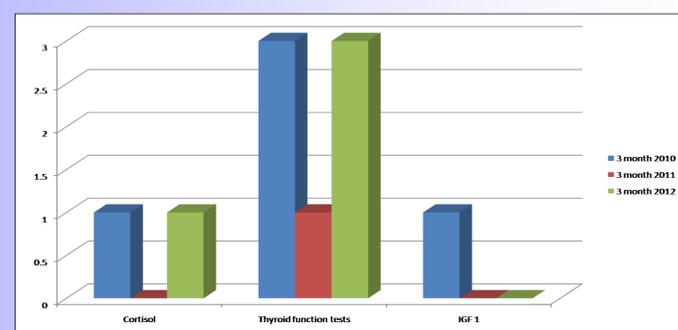
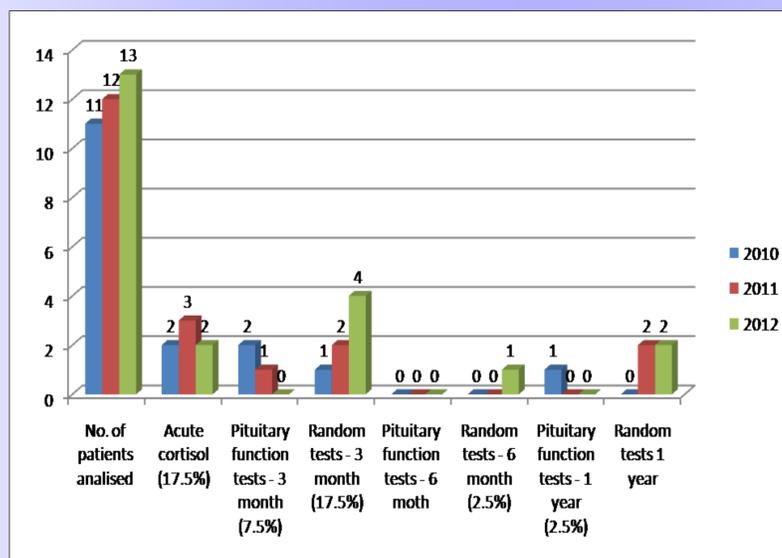
- Retrospective analysis of
 - Head injury nurse data base
 - Hospital electronic data base
 - Department of Pathology database (Including pituitary function tests)
 - Primary care computerised records

Results

Patient demographics:

Female	Male	Total
4	32	36

	Interval	Mean
Age	16–72	36
Length of Hospital Admission (days)	12–266	70.5



Conclusions

1. More than 2/3 of patients had no pituitary function tests.
2. Thus up to 30% could have had unrecognized pituitary dysfunction
3. There is a need for guidelines to inform the endocrine management of these individuals following discharge from the neurosurgical centre

Changes Implemented

- A Pituitary function test 'checklist' has been developed
- Endocrine tests will be done 3/6/12 months post injury
- This strategy will be coordinated by the Head Injury Specialists Nurses in collaboration with the rehabilitation units & Primary care
- A repeat audit will be carried out in twelve months.

References

1. Klose M, Juul A, Struck J, Morgenthaler NG, Kosteljanetz M, Feldt-Rasmussen U, Acute and long-term pituitary insufficiency in traumatic brain injury: a prospective single-centre study. Clin Endocrinol (Oxf). 2007; 67: 598-606

