Psychiatric Manifestations of Endocrine Disease

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Case History

S.C.  Aged 23 female
Anxiety.  Weight loss.  Occasional vomiting
Na 129 mcg/L – twice
Referred to eating disorder clinic
Died 2 months later
Weight 43 kg

Inquest Diagnosed Addison’s disease
Hypothyroidism
Hyperthyroidism
Hyperparathyroidism
Hypopituitarism
Addison’s disease
Cushing’s disease
Hypoglycaemia
Diabetes mellitus
Death  -  Addison’s disease
Murder  -  Cushing’s psychosis
Anxiety  -  Phaeochromocytoma
Drugs  -  raised prolactin
           hypogonadism
Addison’s Disease

Psychiatric symptoms 65%
   Mood disturbances
   Psychosis (rare)

Symptoms
   Weight loss
   Loss of appetite
   Postural hypotension
   Increased pigmentation

Synacthen test
   cortisol <580 nmol/L

Urgent – Steroids given
Cushing's Syndrome

Mood disturbances
Sleep disturbances
Depression
Psychosis
Anxiety

- 83% affective disorder
- 67% endogenous depression
- 27% hypomania
Cushing's Syndrome

Round plethoria face
Thin skin
Weight gain
Leg muscles disproportionate to weight
Causes of Cushing's

Pituitary tumour
Adrenal tumour
Ectopic ACTH secretion

Test:- 24 hour urine cortisol
       Dexamethasone suppression test
Phaeochromocytoma

Anxiety
Panic

Symptoms
- sweating
- hypertension
- headache
- palpitations

Present in 80% of patients

24 hour urine catecholamines
Insulinoma

Anxiety

Symptoms

Neuroglycopenia
irritability, confusion, fits, coma

Diagnosis delayed 10 years

Fasting glucose 15 hours < 2.2 mmol/L
Thyroid disease

Hypothyroidism
Depression
Paranoid
Cognitive impairment
Coma

Common 13.7% mild > 65 years

1.7% overt

TSH is raised > 4 mU/L
Hyperthyroidism

Emotional lability

Anxiety

Psychosis (rare)
Exophthalmos (bulging eyes)
Parathyroid disorders

Hypercalcaemia
(hyperparathyroidism)
Depression
Confusion

Hypocalcaemia
Seizures
Prolactin disorders

Impotence in men
Oligo/amenorrhoea in women

Prolactin
Testosterone
LH/FSH

prolactin
LH/FSH
oestradiol
Prolactin disorders

Drug induced hyperprolactinaemia
Affects sexual function

bones

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<th>Drug-induced Hyperprolactinaemia</th>
<th>Chlorpromazine</th>
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<td>Trifluoperazine</td>
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<td>Perphenazine</td>
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<td>Monoamine oxidase inhibitors</td>
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<td>Selective serotonin reuptake inhibitors</td>
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<td>Tricyclic and tetracyclic antidepressants</td>
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<td>Thioxanthenes, butyrophenones</td>
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Lithium

Hypothyroidism 1.5% per year

Hypercalcaemia
Blood tests for psychiatric patients

TSH
Calcium
prolactin
When to refer to an Endocrinologist

Ca  abnormality
TSH  abnormality
Glucose  abnormality
Hypertension
Oligoamenorrhoea
Impotence
Obesity
Learning Points

Psychiatric manifestations of endocrine conditions can come from:

- Anxiety – consider phaeochromocytoma and insulinoma
- Look for Cushing’s in the obese patient
- Persistent elevation of TSH is usually poor compliance
- If Addison’s is suspected give steroids fast
- Don’t stop long-term steroids suddenly