

A Retrospective Cohort Study of Patients with Hyperprolactinaemia

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Background

- Hyperprolactinaemia is the most common endocrine disorder of the hypothalamic-pituitary axis.
- Investigation involves careful history and examination, laboratory tests and diagnostic imaging.
- Hyperprolactinaemia represents a significant referral volume to secondary care and it is therefore necessary to employ a timely, structured management pathway.

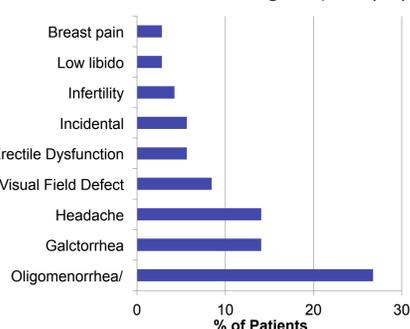
Methods

- Retrospective cohort study at the Department of Endocrinology, University Hospitals Birmingham.
- 450 patients with hyperprolactinaemia identified, measured between June 2011 and June 2012.
- Patients with known hyperprolactinaemia were excluded.
- 71 patients remained for subsequent analysis. Data presented does not include patients with hyperprolactinaemia measured in the community whose prolactins had normalised at time of review.
- Information on symptoms, aetiology and management obtained from patient records.

Results

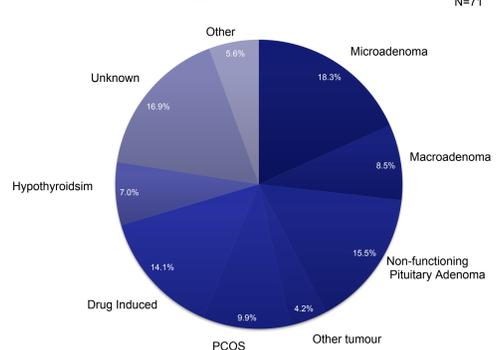
Most Common Presenting Complaint (PC)

Figure 1
N=71



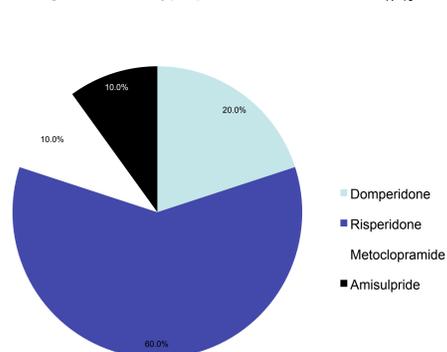
Aetiology of Hyperprolactinaemia

Figure 2
N=71



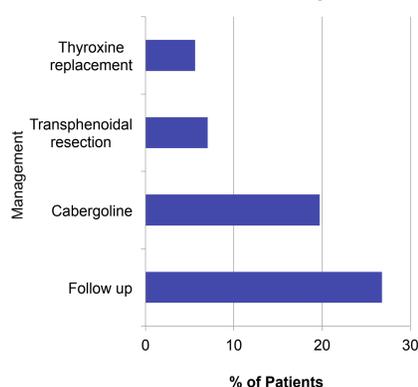
Drug Causes of Hyperprolactinaemia

Figure 3
N=10



Most Common Management

Figure 4
N=71



Results

- 71 patients identified (62.0% female).
- Most common presenting complaint was either oligomenorrhoea or amenorrhoea (29.6%) (figure 1).
- Other significant presenting complaints: galactorrhea (15.5%); headache (14.1%); visual field defects (8.5%) and erectile dysfunction (7.0 %).
- Patients with persistent hyperprolactinaemia underwent MRI pituitary.
- Predominant aetiology was microprolactinoma (18.3%) (mean prolactin 2118.9) and non-functioning pituitary adenoma (15.5%) (mean prolactin 810.5)(figure 2).
- Drug induced hyperprolactinaemia accounted for 14.8% of patients (mean prolactin 1352.5); mostly due to risperidone (60.0%)(figure 3).
- Cause was unknown in 16.90% of patients (mean prolactin 561.0), all patients were followed up.
- Predominant management for the 71 patients was follow up (26.7%) (figure 4) without intervention. Of those followed up, 78.95% of patient's prolactin levels normalised .
- Patient's with normalised prolactin levels had most commonly an unknown aetiology (75.0%) followed by a non-functioning pituitary adenoma (25.0%)(mean prolactin 729.8).
- Patient's whose prolactin levels normalised had a mean prolactin of 617.8 whilst those requiring treatment had a mean prolactin of 1837.7.

Summary and Conclusions

- Investigation and management of hyperprolactinaemia represents a significant service burden in the secondary care setting.
- 5 of the 10 patients thought to have drug induced hyperprolactinaemia underwent MRI pituitary and 100% of these scans were normal.
- May be worth rationalising the use of imaging in such cases and electing for a change in medication and repeat measurement of prolactin.
- Exclusion of patients whose community-measured hyperprolactinaemia had normalised limits cohort number and reflects the need for a larger scale study.
- This small pilot study highlights that in cases of incidentally found hyperprolactinaemia with a borderline result repeating this result in the community may prevent referral.