MANAGEMENT OF HYPOPARATHYROIDISM AGAINST EUROPEAN GUIDELINES: EXPERIENCE OF A LARGE TEACHING HOSPITAL

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INTRODUCTION & AIMS

- Hypoparathyroidism is a rare endocrine condition which until recently had no therapeutic hormone replacement[1].
- The mainstay of current treatment is the use of vitamin D analogues and calcium supplements to maintain serum calcium[1].
- As a result of complications associated with current therapy, careful monitoring of biochemical and radiological parameters is required.
- The aim of this research is to evaluate current management of hypoparathyroidism of a large cohort against European guidelines[2] with the view to identifying those with sub-optimal control who may benefit from recombinant parathyroid hormone[3].

METHODS

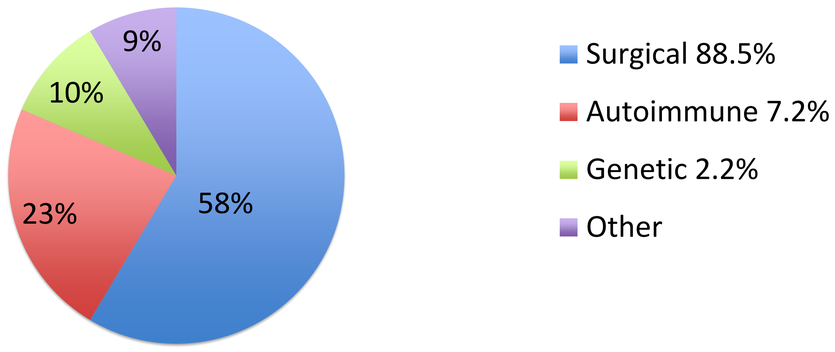
- 164 adult patients with hypoparathyroidism were identified .
- A retrospective design was used to analyse data between 2012-2017 including patient demographics, metabolic control, treatment, monitoring and complications.

RESULTS

DEMOGRAPHICS

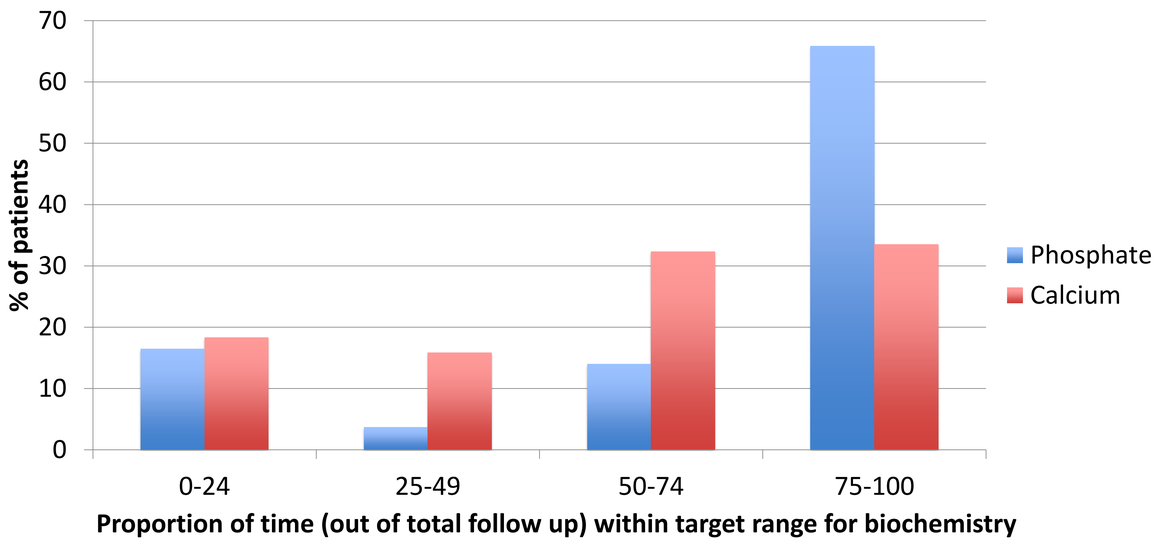
- 70.1% female patients
- Mean age: 56.1 years +/- 16.62

Aetiology of hypoparathyroidism



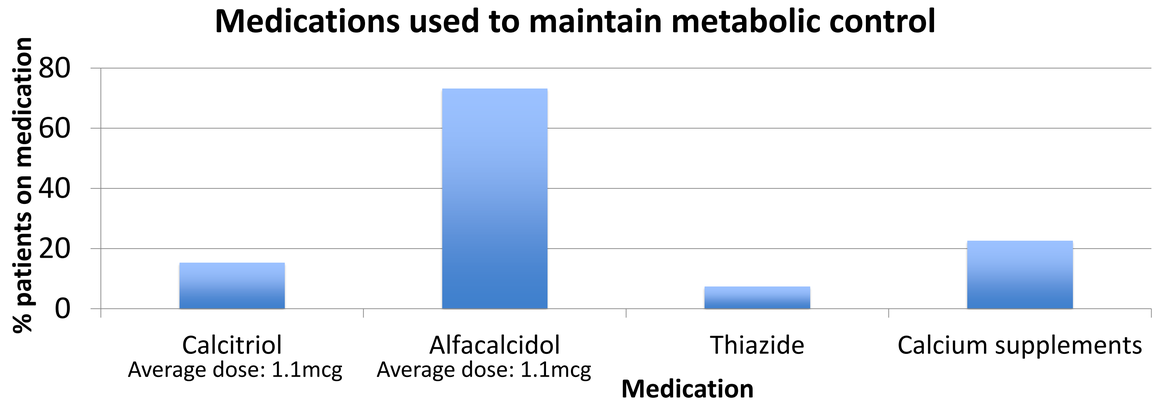
METABOLIC CONTROL

Metabolic control: Proportion of time within target biochemical range per patient



MANAGEMENT

Medications used to maintain metabolic control



MONITORING GUIDELINES

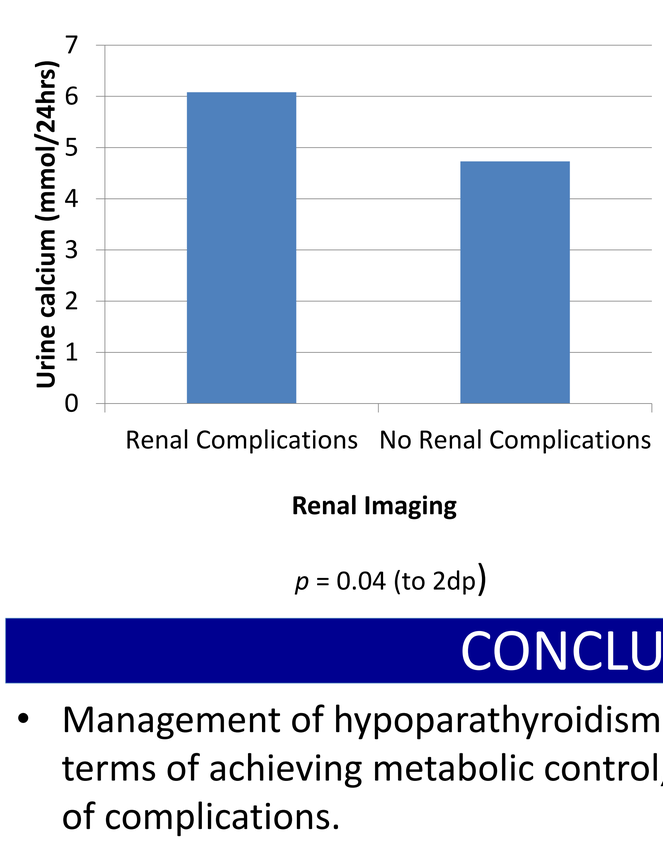
The percentage of patients achieving ESE guidelines

ESE guideline	% patients meeting target
Serum calcium in most recent 12 months (2.1-2.3mmol/L)	47
Serum phosphate in most recent 12 months (0.8-1.5mmol/L)	81
Mean 24 hour urinary calcium levels in range	69
24 hour urine calcium measured every 2 years	30
Symptoms recorded in most recent clinic letter	54
Renal ultrasound performed between 2012-2017	49

COMPLICATIONS

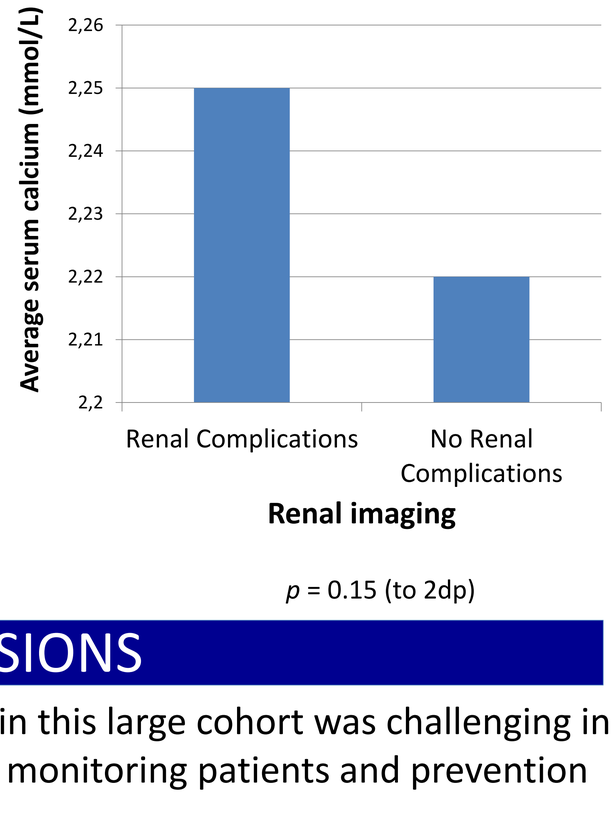
- 50% of patients remained symptomatic to some degree at the most recent review.
- 24% of patients had renal complications including renal calculi, nephrocalcinosis or both

Average 24 hour urinary calcium levels for patients: 2012-2017



p = 0.04 (to 2dp)

Average serum calcium 2012 - 2017



p = 0.15 (to 2dp)

CONCLUSIONS

- Management of hypoparathyroidism in this large cohort was challenging in terms of achieving metabolic control, monitoring patients and prevention of complications.
- A significant proportion of patients remain symptomatic and have evidence of renal complications.
- This data highlights an unmet need in this population for novel therapies, which may offer improved biochemical and symptomatic control.

REFERENCES

1) Monis EL, Mannstadt M. Hypoparathyroidism – disease update and emerging treatments. Ann Endocrinol (Paris) [Internet]. 2015 May [cited 2017 Oct 11];76(2):84–8. Available from: http://linkinghub.elsevier.com/retrieve/pii/S000342661500030X
2) Bollerslev J, Rejnmark L, Marcocci C, Shoback DM, Sitges-Serra A, Van Biesen W, Dekkers OM. European Society of Endocrinology Clinical Guideline: Treatment of chronic hypoparathyroidism in adults. European Journal of Endocrinology. 2015 Aug 1;173(2):G1-20.
3) Mannstadt M, Clarke BL, Vokes T, Brandi ML, Ranganath L, Fraser WD, et al. Efficacy and safety of recombinant human parathyroid hormone (1–84) in hypoparathyroidism (REPLACE): a double-blind, placebo-controlled, randomised, phase 3 study. Lancet Diabetes Endocrinol [Internet]. 2013 Dec 1 [cited 2017 Oct 25];1(4):275–83. Available from: http://linkinghub.elsevier.com/retrieve/pii/S2213858713701062

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