INVESTIGATION OF SUSPECTED HYPERPARATHYROID DISEASE

INTRODUCTION

Interpretative comments on reports:

If patient hypercalcaemic, the following comments will be added to non-endocrinologist reports.

<table>
<thead>
<tr>
<th>PTH</th>
<th>Comment</th>
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<tbody>
<tr>
<td>&gt;6.9</td>
<td>Raised PTH, suggestive of primary hyperparathyroidism. Suggest referral to endocrinologist.</td>
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<tr>
<td>2.6 to 6.9</td>
<td>Normal PTH, consistent with primary hyperparathyroidism. Familial benign hypercalcaemia should be considered. Suggest referral to endocrinologist</td>
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<tr>
<td>1.6 to 2.5</td>
<td>Borderline low PTH, consistent with non-parathyroid cause of hypercalcaemia.</td>
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<tr>
<td>&lt;1.6</td>
<td>Low PTH, consistent with non-parathyroid cause of hypercalcaemia</td>
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All patients (excluding secondary HPTH in renal dialysis) should be referred to Endocrinology team for further evaluation:

1. Confirm raised corrected calcium and PTH on fasting sample
2. Exclude FBH if PTH less than 7.5 pmol/L (see Calcium excretion)
3. Exclude phaeochromocytoma (24hr. urinary catecholamines)

PREVALENCE OF FAMILIAL BENIGN HYPERCALCAEMIA

1 in 200 cases of hypercalcaemia¹, 1 in 20 cases of hypercalcaemia if PTH (mid molecule specificity) is raised (>6.9) and 1 in 4 when PTH is between 2.6 and 6.9 pmol/L².

CALCIUM EXCRETION

Urine excretion is low in FBH. Using fasting serum and 2nd void urine sample the calcium excretion (fasting urine calcium:creatinine ratio x serum creatinine) at a cut-off of 22 gives a sensitivity 95% and a specificity 92% for FBH.

(24hr urine calcium - cut-off 5.1 mmol/l; sensitivity 95% and specificity 63% for FBH)³.

REFERENCES