



Parathyroid Hormone

Synonyms

PTH

Clinical Indication

- Differential diagnosis of hypercalcaemia.
- Assessment of parathyroid activity in patients with chronic renal failure.
- Investigation and monitoring of patients with hyperparathyroidism secondary to vitamin D deficiency or malabsorption.
- Investigation of hypocalcaemia.
- Investigation of abnormal calcium status or monitoring renal bone disease.

Part of Profile / See Also

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

On request, if specific criteria met.

Turnaround Time

Same day (Monday to Friday)

Patient Preparation

Ideally, patients should be fasting (10 hours) except for renal patients. Calcium levels should be requested at same time.

Sample Requirements

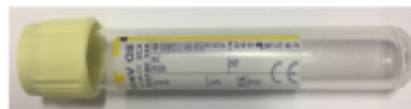
Specimen Type

Plasma

Volume

2 ml

Container



Lemon top (EDTA) tube



Paediatric Lavender top (EDTA) tube and

A yellow top (SST) sample should also be taken for bone profile at the same time.

Reference Range & Units

 1.3 - 9.3 pmol/L for **normocalcaemic** patients

Reference: Beckman method insert).

However, most patients are being investigated for abnormal calcium levels and in non-parathyroid disease PTH levels should reflect calcium status (i.e. high calcium, low PTH). In the presence of hypercalcaemia, a clearly elevated PTH of >7.0 pmol/L is diagnostic of primary hyperparathyroidism, while an appropriately suppressed result of <2.6 pmol/L virtually excludes primary hyper-parathyroidism but could be due to Familial Benign Hypercalcaemia (FBH). Where the PTH is between 2.6 and 7.0 pmol/L, either primary hyperparathyroidism or FBH is possible and a fasting calcium excretion is indicated.

To convert from ng/L (pg/mL) to pmol/L multiply by 0.106

Interferences

Interpretation & Clinical

Decision Value (if applicable)

Critical Difference 72%

References

Test code

PTH

Lab Handling

In line with IFCC recommendations if the sample will not be analysed within 24 hours of the sample collection or if the sample is received after the weekend (from Friday 17:00) the sample must be centrifuged and aliquoted into an LP4 tube and the plasma frozen.