



BML553657

Laboratory Investigation Report

Name	: Mr. QASSEM MOHAMMAD ALKURDI	Ref No.	: 38877
DOB	: 01/08/2001	Sample No.	: 2504567422
Age / Gender	: 23 Y / Male	Collected	: 23/04/2025 18:50
Referred by	: Dr. FARHAN	Registered	: 23/04/2025 22:57
Centre	: CITICARE MEDICAL CENTER	Reported	: 23/04/2025 23:49

ENDOCRINOLOGY

Test	Result	Flag	Unit	Reference Range	Methodology
PARATHYROID HORMONE (INTACT)	33.3		pg/mL	15 - 65	ECLIA

INTERPRETATION NOTES :

- Parathyroid glands secretory activity shows seasonal and circadian fluctuations, which are associated with changes in serum calcium, phosphate and bone turnover. PTH shows a pronounced peak in early morning, a nadir in late morning and a second lower peak in the afternoon.
- The assay measures intact PTH which has been demonstrated to be labile (depending on time and temperature) and susceptible to fragmentation.
Reference: Bone research (2015) 3, 14049
- Variation in parathyroid hormone immunoassay results - a critical governance issue in the management of chronic kidney disease.

PTH	Vitamin D	Suggested Interpretation for Vitamin D & PTH Correlation
Normal	Deficient or insufficient	Vitamin D insufficiency with blunted PTH response- which may be due to associated magnesium deficiency, dietary calcium intake.
Raised	Deficient or insufficient	Vitamin D insufficiency/deficiency with secondary hyperparathyroidism or May have primary hyperparathyroidism masked by co-existent vitamin D deficiency.
Low	Deficient or insufficient	Further correlation with sr. calcium suggested 1. Associate low or normal serum calcium consider possibility of Improper PTH response to calcium, probably hypoparathyroidism with vitamin D deficiency, Preanalytical causes - as PTH being a labile analyte, Repeat testing may be advisable if indicated. 2. Associated high serum calcium consider possibility of physiological PTH response to high calcium & suspect non-parathyroid related diseases like unsuspected stimulation of bone resorption (as with thyrotoxicosis, immobilization, Pagets disease), possibility of malignancy with increased PTH-rp (paraneoplastic syndromes).

Relationship between Sr. PTH Levels, Vit. D sufficiency & Calcium Intake. JAMA, Nov. 9, 2005-Vol 294, No.18

Interpretation Note:

Patients on Biotin supplement may have interference in some immunoassays. With individuals taking high dose Biotin (more than 5 mg per day) supplements, at least 8-hour wait time before blood draw is recommended.

Ref: Arch Pathol Lab Med—Vol 141, November 2017

Sample Type : Serum

End of Report

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Haleem
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This is an electronically authenticated report

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Test result pertains only to the sample tested and to be interpreted in the light of clinical history. These tests are accredited under ISO 15189:2012 unless specified by (^). Test marked with # is performed in an accredited referral laboratory.

