

Knowledge Assessment Recap

You answered out of 8 questions correctly.

Thank you for testing your hypoparathyroidism (HPT) knowledge.

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Question 1: What is the most common cause of hypoparathyroidism?¹

Surgical damage to the parathyroid glands

Damage to the parathyroid glands during thyroidectomy, parathyroidectomy, or other neck surgeries accounts for ~75% of acquired hypoparathyroidism cases in the US.^{1,2}

Question 2: Endogenous parathyroid hormone (PTH) is a critical regulator of mineral homeostasis in several organ systems including^{3,4}:

Skeletal
Renal
Gastrointestinal
All of the above

PTH is secreted from the parathyroid glands in response to falling levels of circulating ionized calcium.⁵

Question 3: Chronic hypoparathyroidism can be diagnosed when low levels of endogenous PTH persist for at least 6 month(s).¹

Chronic HPT poses significant and debilitating impacts to numerous body systems, including the renal, neuropsychiatric, skeletal, and cardiovascular systems.⁶

Question 4: Patient analyses indicate which of the following comorbidities contribute to hypoparathyroidism's significant potential burden of illness?⁷

Nephrolithiasis
Seizures

HPT may also impact patients' quality of life, interfering with emotional wellbeing and daily activities.⁸

Question 5: Based on international and European guidelines, a serum calcium level of 8.0–9.0 mg/dL is the target range when managing patients with hypoparathyroidism?^{2,9,10}

Normal serum calcium levels range from 8.4–10.6 mg/dL.¹¹

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Question 6: How frequently should 24-hour urine calcium be monitored in patients with HPT?⁵

At least once per year

Following adjustments in calcium or vitamin D dose, calcium values should be assessed more frequently.³

Question 7: International and European guidelines recommend which of the following therapeutic goals in patient with HPT?^{2,10}

Avoiding hypercalciuria and hypercalcemia
Maintaining calcium phosphate product <55 mg²/dl²
Reducing potential for renal and other extraskeletal calcifications
All of the above

A comprehensive management approach including these and other therapeutic objectives may help reduce or prevent several complications of chronic HPT.^{2,3,10}

Question 8: Hyperphosphatemia and/or calcium phosphate product exceeding 55 mg²/dL² (4.4 mmol²/L²) may suggest poorly controlled HPT.¹⁰

True

Regular monitoring of several indicators in addition to serum calcium can help you determine poor disease control.¹⁰

REFERENCES:

1. Khan AA, Koch CA, Van Uum S, et al. Standards of care for hypoparathyroidism in adults: a Canadian and international consensus. *Eur J Endocrinol.* 2019;180(3):P1-P22.
2. Bollerslev J, Rejnmark L, Marcocci C, et al. European Society of Endocrinology clinical guideline: treatment of chronic hypoparathyroidism in adults. *Eur J Endocrinol.* 2015;173(2):G1-G20
3. Mannstadt M, Bilezikian JP, Thakker RV, et al. Hypoparathyroidism. *Nat Rev Dis Primers.* 2017;3:17055. doi:10.1038/nrdp.2017.55.
4. Shoback D. Hypoparathyroidism [clinical practice]. *N Engl J Med.* 2008;359(4):391-403.
5. Marieb EN, Hoehn K. The endocrine system. In: Marieb EN, Hoehn K, eds. *Human Anatomy & Physiology.* 9th ed: Pearson Education; 2012:591-630.
6. Shoback DM, Bilezikian JP, Costa AG, et al. Presentation of hypoparathyroidism: etiologies and clinical features. *J Clin Endocrinol Metab.* 2016;101(6):2300-2312.
7. Underbjerg L, Sikjaer T, Mosekilde L, Rejnmark L. Cardiovascular and renal complications to postsurgical hypoparathyroidism: a Danish nationwide controlled historic follow-up study. *J Bone Miner Res.* 2013;28(11):2277-2285.
8. Siggelkow H, Clarke BL, Germak J, et al. Burden of illness in not adequately controlled chronic hypoparathyroidism: findings from 13-country patient and caregiver survey. *Clin Endocrinol (Oxf).* 2020;92(2):159-168.
9. Horwitz MJ, Stewart AF. Hypoparathyroidism: is it time for replacement therapy? *J Clin Endocrinol Metab.* 2008;93(9):3307-3309.
10. Brandi ML, Bilezikian JP, Shoback D, et al. Management of hypoparathyroidism: summary statement and guidelines. *J Clin Endocrinol Metab.* 2016;101(6):2273-2283.
11. Quest Diagnostics. Test Center. Calcium Spectrophotometry: <https://testdirectory.questdiagnostics.com/test/test-detail/303/?cc=MASTER> Accessed July 8, 2020.