



# HYPOPARATHYROIDISM AND CELIAC DISEASE; A RARE AUTOIMMUNE DISEASE COMBINATION



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## CASE

- A 30-years-old man with hypoparathyroidism who has been treated with calcitriol and calcium for two years, admitted to our hospital with persisting diarrhea.
- An endoscopic procedure is planned for his complaint. But he was waiting for this examination as outpatient condition, he had a convulsion and had been taken in hospital by parents.
- Initial laboratory analyses revealed that he was hypocalcemic (total calcium of 6 mg/dL), and Parathormone (PTH) level was;8 pg/mL (normal range; 15-65) , phosphorus level 5,7 mg/dL (normal range; 2.5-4.5) and magnesium level was 2 mg/dL (normal range;1,5-2.5).
- He was treated with intravenous calcium gluconate urgently. Then treated with oral calcium carbonate and calcitriol with a stepwise increase in the dosage.
- An upper gastrointestinal system endoscopy has applied to the patient. Diagnosis of gluten-sensitive or celiac disease was suggested at endoscopy, due to flat mucosa and confirmed by histological findings in duodenal biopsy including absent villi, crypt hyperplasia and lymphocytic infiltration in the epithelium. Serologic examination confirmed the diagnosis.

- After then he was placed on gluten-free diet, which rapidly lead to the normalization of his bowel habits and improved his metabolic parameters. The needed drug dosage is decreased.

## CONCLUSION

- Hypoparathyroidism is an uncommon endocrine-deficiency disease characterized by low serum calcium levels, elevated serum phosphorus levels, and absent or inappropriately low levels of PTH in the circulation.
- After postoperative hypoparathyroidism, autoimmune hypoparathyroidism is the next most common form of hypoparathyroidism in adults.
- Patients with hypoparathyroidism most often present with paresthesia, cramps, or tetany, but the disorder also may manifest with acute seizures, bronchospasm, laryngospasm, or cardiac rhythm disturbances.
- Autoimmune hypoparathyroidism may be isolated or part of an autoimmune polyglandular syndrome. Celiac disease and autoimmune hypoparathyroidism togetherness is a very rare condition but the possibility of celiac disease should be considered in patients with hypoparathyroidism that seems unduly difficult to treat.