

Normocalcemic Primary Hyperparathyroidism associated with Fibrocalculous Pancreatic Disease & Vitamin D Deficiency: A Case Report

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Abstract

Normo-calcemic primary hyperparathyroidism (NHPT) is a disorder in which elevated parathyroid hormone (PTH) is the result of autonomic hypersecretion of parathyroid hormone from 1 or more parathyroid glands and the serum calcium levels are consistently within the normal range. A 65 years old diabetic women presented with recurrent upper abdominal pain for 5 months, progressively increasing in severity and diagnosed with chronic pancreatitis with FCPD depending on biochemical and radiological findings. Investigations revealed a normal serum calcium level (9.5 mg/dl), low phosphate level (2.3 mg/dl), persistently high parathyroid hormone (PTH) level (785.8 pg/ml), normal serum creatinine (0.93 mg/dl), severely low serum vitamin D (9.37 ng/ml), high alkaline phosphatase (206 U/L), elevated blood glucose (RBS-12.9), normal liver and thyroid functions. Ultrasonogram and CT scan of abdomen revealed an atrophic pancreas, dilated major pancreatic duct (MPD) with multiple calculi in the lumen, pancreatic calculi & lipomatosis. SPECT Tc99m-MIBI scan was positive for hyperactive parathyroid adenoma (left-inferior) suggesting PHPT from hyperactive single parathyroid adenoma. Presence of normocalcemia in case of PHPT with parathyroid adenoma raise diagnostic dilemma in this case. A severely low serum vitamin D level may explain the normal serum calcium level despite a very high PTH stimulation. FCPD also contributed to normal calcium level despite high PTH. After exclusion of secondary causes, diagnosis of PHPT was confirmed. After several literatures' reviews, vitamin D therapy was given as serum calcium level was just in normal range with no risk of hypercalcemia. A minimally invasive parathyroid surgery is planned to remove the parathyroid adenoma with preservation of other parathyroid glands to avoid any incidence of hungry bone syndrome. [*J Assoc Clin Endocrinol Diabetol Bangladesh, 2025;4(Suppl 1): S65*]

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