Hypercalcaemia was unmasked later in this case upon the resolution of the above-mentioned conditions. During pregnancy, surgery is the treatment of choice during the second trimester in cases of severe hypercalcemia (calcium >3.0 mmol/L) because medical therapy options are unsafe.

## EP_A039

### A CHALLENGING CASE OF FAMILIAL HYPOCALCIURIC HYPERCALCEMIA CONCEALED BY CONCOMITANT VITAMIN D DEFICIENCY AND PAPILLARY THYROID CARCINOMA

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**INTRODUCTION/BACKGROUND**
Familial hypocalciuric hypercalcemia (FHH) is a rare autosomal-dominant disorder resulting from an inactivating mutation in the calcium-sensing receptor (CASR) gene. It is generally benign and characterized by longstanding parathyroid hormone (PTH) - dependent hypercalcemia. Resection of the parathyroid tissue does not normalize serum calcium.

**CASE**
We report a case of FHH with evaluation confounded by vitamin D deficiency and newly diagnosed papillary thyroid carcinoma.

A 63-year-old female was incidentally noted to have hypercalcemia with elevated PTH during admission for pneumonia. She had completed antituberculosis therapy for gastrointestinal tuberculosis 2 years ago. The baseline vitamin D level was 24nmol/L (NV: 75-100), and the 24-hour urine calcium creatinine ratio was 0.01. Bone mineral density revealed an osteopenic spine. Focused parathyroidectomy was performed after technetium (99mTc) sestamibi SPECT scan which revealed a left superior parathyroid adenoma. However, the calcium levels remained elevated. Histopathological examination of the postoperative sample revealed a metastatic papillary thyroid carcinoma in the lymph node. Hence, she underwent total thyroidectomy, left modified neck dissection, and total parathyroidectomy with auto-transplantation of parathyroid tissue into the presternal space. Albeit that, the serum calcium and PTH remained elevated. PTH-related protein (PTHrP) and 1,25 hydroxy vitamin D levels were within normal range. Opportunistic screening of her daughter revealed that she had raised calcium levels with inappropriately normal PTH and 24-hour urinary calcium creatinine ratio of less than 0.01. The patient's repeated 24-hour urinary calcium creatinine ratio after repletion of vitamin D was also less than 0.01. We diagnosed her with FHH based on positive family screening and longstanding asymptomatic PTH-dependent hypercalcemia refractory to parathyroidectomy.

**CONCLUSION**
Our case highlights the diagnostic dilemmas in hypercalcemia, the importance of screening family members and the repetition of 24-hour urine calcium creatinine ratio after correction of vitamin D deficiency.

## EP_A040

### TERIPARATIDE [HUMAN PARATHYROID HORMONE (PTH) 1-34] FOR THE MANAGEMENT OF POST-THYROIDECTOMY HYPOCALCEMIA EXACERBATED BY CHYLE LEAK

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**INTRODUCTION/BACKGROUND**
Hypocalcaemia secondary to hypoparathyroidism is a common complication of thyroidectomy. Another less common but serious complication is chyle leak which may also lead to electrolyte abnormalities, including hypocalcaemia. We report a case of refractory hypocalcaemia following thyroidectomy complicated by chyle leak which was successfully managed with teriparatide.

**CASE**
A 37-year-old male had undergone total thyroidectomy with central and left lateral neck dissection for papillary thyroid carcinoma. After the surgery, up to 200 cc/day of milky fluid were noted in his neck drain. Biochemical analysis showed high triglyceride content (2.3 mmol/L), consistent with chyle. He was initially treated conservatively with total parenteral nutrition, pressure dressing and subcutaneous octreotide.

On postoperative day (POD) 3, he had symptomatic hypocalcaemia (corrected calcium 1.95 mmol/L). PTH was undetectable (<0.5 pmol/L). However, despite intravenous calcium gluconate infusion, high doses of activated vitamin D and calcium supplements (calcitriol 4.5 mcg/day, alphacalcidol 2 mcg/day and calcium carbonate 6 g/day), his calcium level remained as low as 1.9 mmol/L by POD