

#### **CONCLUSION**

Parathyroid apoplexy resulting in resolution of PHPT is uncommon and the best management approach (surgery or conservative) remains uncertain. As recurrence have been reported, long term monitoring is essential for patients managed conservatively.

### **EP\_A097**

# A CASE OF PRIMARY HYPERPARATHYROIDISM COEXISTING WITH MONOCLONAL GAMMOPATHY OF UNDETERMINED SIGNIFICANCE (MGUS)

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#### INTRODUCTION/BACKGROUND

Hypercalcemia is a relatively common clinical problem in hospitalized patients. Primary hyperparathyroidism and plasma cell dyscrasias such as multiple myeloma and monoclonal gammopathy of undetermined significance (MGUS) are known to be the most common causes of hypercalcemia. Although the occurrence of these disorders in one patient has been reported previously, it is still believed to be a rare phenomenon. We report a case of hypercalcemia, resulting from coexistent primary hyperparathyroidism and MGUS.

#### **CASE**

A 45-year-old female with no previous medical illness was admitted for symptomatic hypercalcemia. A review of symptoms during admission was significant for constipation, nausea, anorexia, polyuria and thirst. Initial blood investigations showed hypercalcemia (corrected calcium 4.43 mmol/L), renal impairment (creatinine 154 mmol/L) and anaemia (haemoglobin 9 g/dL). Hypercalcemia was managed with intravenous hydration, bisphosphonates and furosemide. Subsequent tests include elevated intact parathyroid hormone (820.4 pg/ml) and an elevated 24-hour urinary calcium/creatinine clearance ratio of 0.07, suggestive of primary hyperparathyroidism. This was further supported by the finding of a right parathyroid adenoma on neck ultrasound.

Due to an abnormal albumin/globulin ratio of 0.89, serum protein electrophoresis was also done which revealed IgG lambda paraproteinemia. The skeletal survey and bone scan were normal. Bone marrow and trephine biopsy showed

the presence of clonal plasma cells at less than 10 percent, which confirmed the diagnosis of MGUS. The patient is currently under multidisciplinary care in endocrinology and haematology subspecialties. Sestamibi parathyroid scan has been arranged for preoperative localization. She is also being monitored closely for progression to multiple myeloma.

#### **CONCLUSION**

This case gives significant insights into potential concomitant causes of hypercalcemia. A high index of suspicion and a systematic approach to performing relevant screening tests are essential, as earlier diagnosis leads to improved clinical outcomes.

#### **EP\_A098**

# REVEALING THE HIDDEN MASK: A CASE ON PRIMARY HYPERPARATHYROIDISM MIMICKING PREGNANCY SYMPTOMS

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#### INTRODUCTION/BACKGROUND

Parathyroid adenoma in pregnancy is uncommon, posing diagnostic and treatment challenges. We report a case of primary hyperparathyroidism (PHPT) due to a parathyroid adenoma successfully treated with surgery during pregnancy.

#### **CASE**

A 20-year-old female, gravida 2 para 0+1, presented with vomiting since the fourth week of pregnancy. She also reported experiencing left shoulder pain, abdominal discomfort, polyuria, nocturia, and constipation. Initially diagnosed with hyperemesis gravidarum, further investigation revealed hypercalcemia with a serum calcium level of 3.66 mmol/L, phosphate level of 0.7 mmol/L, and markedly elevated intact parathyroid hormone (iPTH) at 15.53 pmol/L (normal value: 1.6-6.9 pmol/L). Despite attempts to lower calcium levels through hydration and diuresis with furosemide, her serum calcium remained elevated at 3.14 mmol/L. She received six doses of subcutaneous calcitonin due to persistent hypercalcemia, resulting in a reduction of calcium to 2.83 mmol/L. Ultrasonography of the neck detected a left superior parathyroid adenoma. At 25 weeks of gestation, she underwent a successful left superior parathyroidectomy with intraoperative parathyroid hormone monitoring, resulting in positive outcomes for both mother and baby.



We described a case of PHPT secondary to a parathyroid adenoma presenting with typical pregnancy symptoms. A high index of suspicion warrants screening for serum calcium levels in hyperemesis gravidarum if symptoms persist beyond the first trimester or are severe, and if symptoms suggestive of hypercalcemia are present. Early detection is crucial for the timely management and improvement of maternal and foetal outcomes. Maternal complications can be as high as 67% including nephrolithiasis, pancreatitis, hyperemesis gravidarum, muscle weakness, confusion, hypercalcaemic crisis, and can also lead to miscarriages and pre-eclampsia.

#### **CONCLUSION**

Recognizing primary hyperparathyroidism can be challenging as symptoms may overlap with typical pregnancy. Surgery is the sole curative measure for primary hyperparathyroidism, well-tolerated during pregnancy with minimal adverse effects.

#### **EP A099**

# THE MISSING PIECE OF ADULT HYPOPHOSPHATEMIC RICKETS PUZZLE: A CASE REPORT OF SUSPECTED X-LINKED HYPOPHOSPHATEMIA (XLH) WITH RECURRENT DENTAL ABSCESS

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#### INTRODUCTION/BACKGROUND

X-linked Hypophosphatemia (XLH) is associated with primary musculoskeletal complications and can present with recurrent dental-related complications.

#### **CASE**

We present a case of poorly treated XLH who not only presented with typical bone deformities but also with overlooked dental complications. A 24-year-old female presented to us with short stature, severe bowing of the legs with leg pain, frontal bossing, and bilateral genu varus with recurrent dental-related problems requiring multiple visits to the dentist, causing distress as she is losing her teeth. She had undergone an osteotomy four times on her left femur. Family history was insignificant. Assessment by the dentist reveals multiple cyst and abscess formations at both the upper and lower jaws and malocclusion.

She has normal calcium (2.18 mmol/L), low phosphate (0.47 mmol/L) with low Renal-Tubular-Reabsorption-of-Phosphate (TMP/GFR) [0.67 mmol/L] and vitamin

D deficiency (35 nmol/L). No evidence of other renal electrolytes or acid-base loss was noted. Her intact PTH and ALP were normal. Serum calcium, phosphate, and vitamin D levels improved with Sandoz phosphate 500 mg given twice daily, alphacalcidol 1 mg once daily, and calcium carbonate 500 mg twice daily. Her latest serum calcium was 2.39 mmol/L, serum phosphate increased to 0.71 mmol/L, vitamin D level likewise improved to 88.9 nmol/L, and iPTH was normal 27.7 pg/ml (14.9–56.9). Ultrasound of the kidneys did not show any medullary nephrocalcinosis. No confirmatory genetic tests to look at PHEX mutation gene were done due to financial constraints.

#### CONCLUSION

Adult XLH can present with only dental-related issues and are often overlooked. It can lead to premature tooth loss, resulting in adverse practical, cosmetic, and social sequelae. Hence, dental-related complaints should always be addressed and treated. Studies have shown that dental issues are milder among people who underwent conventional therapy compared to those who did not receive continuous treatment. Supplementation with phosphorus and a vitamin D analogue enhances the mineralization of dentin and decreases the frequency of dental abscesses.

#### **EP A100**

#### FAILED LOCALIZATION IN PRIMARY HYPERPARATHYROIDISM DUE TO POLYGLANDULAR DISEASE

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#### INTRODUCTION/BACKGROUND

Primary hyperparathyroidism (PHPT) is characterized by hypercalcemia driven by excess secretion of parathyroid hormone (PTH). While solitary hyperfunctioning parathyroid adenomas account for up to 90% of cases, localizing hyperfunctioning glands in multiglandular disease (MGD) is more challenging.

#### CASE

A 46-year-old female presented with chronic vomiting and significant weight loss, leading to a diagnosis of primary hyperparathyroidism with secondary osteoporosis and severe vitamin D deficiency. She had five admissions over 10 months for severe hypercalcemia, (3.6- 4.4 mmol/L) requiring intravenous bisphosphonates.