

the balance between these two opposing physiologies varies between individuals. This is a rare case documenting a dramatic decline in the need for calcitriol in a patient with hypoparathyroidism during the postpartum and lactation period, followed by a sudden resurgence in calcitriol requirement occurring immediately upon cessation of breastfeeding.

EP_A081

DIFFERENT FACADES OF PTH-DEPENDENT HYPERCALCEMIA IN PREGNANCY

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INTRODUCTION/BACKGROUND

Hypercalcemia is a rare occurrence during pregnancy. This can present variably and pose unique challenges in management. The general diagnostic approach is similar to the non-pregnant population however, additional considerations must be taken regarding the modality of investigations and safe treatment options during pregnancy. We present 3 pregnant patients who had PTH-dependent hypercalcemia. We explore their clinical presentation, diagnostic evaluation, management, and outcomes. Through this case series, we aim to highlight different aspects of management for hypercalcemia during pregnancy.

CASE 1

A 32-year-old patient at 33 weeks period of gestation (POG) presented with acute pancreatitis and was found to have hypercalcemia 2.99 mmol/L and raised iPTH 16.64 pmol/L (reference range 1.59 - 7.24). Calcium levels showed a decreasing trend with hydration alone and the patient had an uneventful delivery at term. Postpartum calcium: creatinine clearance ratio (CCCR) of 0.02 confirmed primary hyperparathyroidism. Further evaluation was planned, however she defaulted on follow-up.

CASE 2

A 37-year-old patient at 15 weeks POG presented with renal impairment due to nephrolithiasis, with severe hypercalcemia 3.9 mmol/L and elevated iPTH 162.4 pmol/L. Ultrasonography of the neck showed a left lower pole parathyroid lesion measuring 1.9 x 2.3 x 2.4 cm. Hypercalcemia was refractory to hydration and required calcitonin, cinacalcet and pamidronate. Left-focused parathyroidectomy was performed at 17 weeks POG. Calcium levels normalized postoperatively. Histopathological examination confirmed parathyroid

adenoma. Unfortunately, the patient opted for termination of pregnancy due to worsening renal function.

CASE 3

A 31-year-old patient was diagnosed with Familial Hypocalciuric Hypercalcemia (FHH), evidenced by mild hypercalcemia 2.8 mmol/L, elevated iPTH 8.2 pmol/L, CCCR <0.01, and normal Vitamin D levels. There was worsening hypercalcemia at 2.98 mmol/L during pregnancy which improved with hydration. The pregnancy then continued uneventfully.

CONCLUSION

Hypercalcemia is rare in pregnancy, but its treatment necessitates a delicate balancing act to ensure the safety of both mother and offspring. Treatment must be given in a timely manner, and reassurance has to be provided to patients with benign conditions such as FHH.

EP_A082

POSTMENOPAUSAL VITAMIN D SCREENING AND INITIATION OF TREATMENT

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INTRODUCTION/BACKGROUND

Menopause induces bone density loss due to oestrogen deficiency, predisposing women to osteoporosis and fractures. It is estimated that of the 200 million women affected globally, 50% are post-menopausal. Vitamin D deficiency further compounds bone healing. Recent meta-analyses show that over half the Malaysian population has inadequate levels of Vitamin D, underscoring the need for proactive measures in women's health screening. Initiating anti-resorptive medication during the early post-fracture period has in the past raised concerns about fracture healing, however, recent studies do not reflect this. The preponderance of available data suggests that anti-resorptives are safe to be initiated as early as 1-2 weeks post-fracture.

METHODOLOGY

We examined the awareness of screening for Vitamin D deficiency and the time to initiation of treatment within this demographic.

This is a retrospective study among women with postmenopausal osteoporotic fractures seen from the years 2022 to 2023 in Hospital Putrajaya, looking into screening for Vitamin D deficiency and the timing of initiation of definitive osteoporotic treatment.

RESULTS

Of the total of 101 patients screened from various departments, including endocrinology, rheumatology, orthopaedics and gynaecology, 20 patients (19.8%) with osteoporotic fractures were not screened for Vitamin D deficiency. Among the 81 screened patients, 54.3% were Vitamin D deficient, of which 2.4% were severely deficient. Furthermore, 77.2% of patients were found to have initiated osteoporosis treatment beyond two weeks after the fracture.

CONCLUSION

This study showed most patients were screened for Vitamin D deficiency, but its high prevalence should be considered. The study also shows that osteoporosis treatment was initiated beyond two weeks post fracture in majority of our patients.

EP_A083**SEVERE REFRACTORY HYPERCALCEMIA DUE TO ECTOPIC PARATHYROID LEADING TO MORTALITY**

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INTRODUCTION/BACKGROUND

Hypercalcemia can manifest in a nonspecific manner, with vague symptoms which can be easily missed. Most cases of severe hypercalcemia are due to primary hyperparathyroidism or malignancy-related hypercalcemia, which is discernible by parathyroid hormone levels. We describe a case of severe refractory hypercalcemia attributed to ectopic parathyroid, which led to multiple morbidities and eventually mortality.

CASE

A 61-year-old male, with known hypertension and chronic kidney disease Stage III, presented with abdominal discomfort, loss of appetite, nausea and vomiting for 2 weeks duration. On examination, he was dehydrated, obese and hypertensive. Laboratory investigations showed markedly raised serum corrected calcium level of 5.17 mmol/L, low serum phosphate 0.63 mmol/L and iPTH of 35.39 pmol/L [NR 1.95-8.49]. Other investigations: Hb 15.6 g/dL, creatinine 303 umol/L, eGFR 18 ml/min/1.73 m² and urea 5.7 mmol/L. Tumour markers CA 19-9, CA 125, AFP and CEA were normal. Paraneoplastic markers were negative. Neck ultrasound did not reveal any parathyroid lesion however, computed topography of the neck-thorax-abdomen-pelvis, revealed a well-defined hypodense soft tissue lesion at the superior mediastinum, inferior

to the left inferior thyroid border, measuring 2.1 x 2.6 x 3.6 cm which may represent an ectopic parathyroid gland. Severe refractory hypercalcemia was treated with vigorous intravenous saline hydration, subcutaneous calcitonin, intravenous bisphosphonates and subcutaneous denosumab. His admission was prolonged and complicated with septicaemia requiring intubation and intensive care. The patient passed away after three weeks of admission.

CONCLUSION

This case demonstrates that severe and refractory hypercalcemia attributed to an ectopic parathyroid lesion may present late due to vague initial symptoms. Admission due to severe hypercalcemia require multiple modalities of treatment, may be prolonged and carries a high risk of mortality before definitive treatment with parathyroidectomy.

EP_A084**ENDOMETRIOSIS-TRANSFORMED UTERINE CLEAR CELL CARCINOMA WITH ASYMPTOMATIC PTHrP MEDIATED HYPERCALCEMIA: A CASE REPORT**

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INTRODUCTION/BACKGROUND

Hypercalcemia is a well-recognized complication of various solid tumours and hematologic malignancies. Clear cell carcinoma arising from the malignant transformation of endometriosis is a rare and typically aggressive cancer which occasionally presents only with hypercalcemia.

In this report, we describe a case of parathyroid hormone-related protein (PTHrP) hypercalcemia secondary to endometrial clear cell carcinoma including the results of biochemical laboratory tests and discuss treatment strategies with related literature reviews.

CASE

A 50-year-old female with endometriosis was incidentally found to have mild hypercalcemia during hospitalization for SAR COV (COVID-19) infection. Parathyroid hormone (iPTH) was suppressed, while PTHrP was significantly elevated at 30 pmol/L (<1.3 pmol/L). A comprehensive investigation for malignancy was done, which revealed no abnormalities except for the progressive enlargement of her underlying endometriosis. An extended hysterectomy was performed, and subsequent histological examination confirmed the presence of endometrial clear cell carcinoma. Post-surgery, her serum calcium level went back to normal levels.