a clearly identifiable parathyroid adenoma, it is imperative to employ a combination of imaging techniques to identify any possible ectopic focus, which yields the maximum benefit. Following localization, surgical resection continues to be the preferred mode of treatment for achieving a permanent cure.

EP_A092

COMPLEX SCENARIO OF MEN 1 WITH ECTOPIC PARATHYROID GLAND: A CASE REPORT

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INTRODUCTION/BACKGROUND
In the context of Multiple Endocrine Neoplasm 1 (MEN1), primary hyperparathyroidism (PHPT) is the most prevalent form of endocrinopathy and is often the earliest endocrine manifestation among patients. It represents 2–4% of all forms of PHPT. Ectopic parathyroid adenomas (EPTA) account for a significant proportion, approximately 22% of PHPT cases. To mitigate the adverse effects of PHPT in MEN1 patients, the optimal course of treatment is parathyroidectomy. We present a complex case of MEN1 that involves an ectopic parathyroid gland.

CASE
A 54-year-old female presented with symptomatic hypercalcemia with a serum calcium of 3.63 mmol/L (2.1-2.55) along with multiple duodenal ulcers and a Hb of 8.7g/dL (12-15) in 2008. Clinical diagnosis of Multiple Endocrine Neoplasia 1 was made, as validated by primary hyperparathyroidism, microprolactinoma and non-functioning pancreatic neuroendocrine tumour grade 1. She underwent total parathyroidectomy in July 2008 with a right inferior auto-transplantation into the sternocleidomastoid muscle. Histopathological analysis confirmed parathyroid hyperplasia in all 4 glands. Ten years later, she exhibited an increasing trend of serum calcium 2.57-2.63 mmol/L and iPTH (7.05->12.89->14.4 pmol/L) (1.58-6). Neck ultrasonography revealed a well-defined elongated hypoechoic structure within the right sternocleidomastoid muscle measuring 0.2 x 0.4 x 0.9 cm (AP x W x CC). Parathyroid scintigraphy Tc99M Sestamibi with SPECT-CT demonstrated the presence of an ectopic parathyroid adenoma measuring 0.7 x 0.9 cm at the right upper paratracheal/suprasternal region. Subsequently, she underwent exploratory parathyroidectomy with the removal of the right auto-transplant parathyroid gland and right thymus. Histopathological analysis was consistent with parathyroid hyperplasia and ectopic parathyroid accordingly. Postoperatively she remained hypercalcaemic 2.7 mmol/L with non-suppressible iPTH 27.46 pmol/L. Levels of 25-OH (D) were insufficient at 40.72 nmol/L. Further localization studies were contemplated. However, 4D CT assessment was not done due to her deteriorating renal function. She was given oral cholecalciferol 1000 IU daily and cabergoline 1 mg daily.

CONCLUSION
Despite significant progress in imaging technologies and surgical techniques, the management of EPTA remains a challenging task in clinical practice. Specialized multidisciplinary input is crucial in managing such cases.

EP_A093

A MORE SINISTER CAUSE OF LOWER BACK PAIN IN THE THIRD TRIMESTER: A CASE REPORT OF PREGNANCY AND LACTATION-ASSOCIATED OSTEOPOROSIS

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INTRODUCTION/BACKGROUND
Pregnancy and lactation-associated osteoporosis (PLO) is a rare but painful condition that tends to occur during the third trimester or postpartum period, with an incidence of 0.4 cases/100,000 women and 70% of those affected are primiparous. The main symptom is severe lower back pain as this condition often causes vertebral fractures which can be multiple.

CASE
We present a case of a 28-year-old female with an underlying right coronary artery fistula and endometriosis. She is para 1 and delivered her child in December 2022. During this pregnancy, she had a history of severe back pain during the third trimester. There was no history of falls or any neurological deficits. She gave a history of coccyx fracture following a fall eight years ago but recovered uneventfully. She breastfed her baby for five months post-partum and her back pain persisted during this period which prompted further investigations for her. She did not consume any steroids and there were no signs and symptoms to suggest Cushing's Syndrome.

Initial biochemical results were all within normal range: calcium 2.41 mmol/L, phosphate 1.0 mmol/L, ALP 84 U/L, TSH 1.83 m IU/L, FT4 14.8 pmol/L and i-PTH 4.8 pmol/L. Overnight dexamethasone suppression test was appropriately suppressed (15 nmol/L). Her vitamin D level was insufficient at 51 nmol/L. Radiography confirmed T10 vertebral compression fracture and her DEXA scan revealed that she is osteoporotic with spine Z-score -3.2, and femur Z-score -3.5.

She was managed with oral cholecalciferol 1000 units daily and calcium carbonate 500 mg twice daily as she preferred to not use any anti-resorptive agent. Her back pain improved after cessation of lactation and with analgesics.

CONCLUSION

PLO is a rare condition and should be suspected in pregnant women who complain of back pain to ensure early diagnosis and intervention. Secondary causes of osteoporosis need to be ruled out as well.

EP_A094

SEVERE HYPERCALCEMIA UNMASKS A CAMOUFLAGED PARATHYROID CARCINOMA

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INTRODUCTION/BACKGROUND

Parathyroid carcinoma is an exceedingly rare endocrine malignancy and an uncommon cause of primary hyperparathyroidism. We report a case of severe hyperparathyroidism which required urgent surgery and unveiled a parathyroid carcinoma.

CASE

A 31-year-old Malay female, who initially presented with severe epigastric pain and vomiting, was treated for acute pancreatitis in the surgical ward. There was no history of alcohol consumption. Biochemistry results showed acute renal impairment, hypercalcemia (corrected Ca2+ 4.06 mmol/L), hypophosphatemia (PO43- 0.38 mmol/L), elevated serum amylase (370 U/L) and urine diastase (663 U/L). However, no sonographic evidence of cholelithiasis was found. She was referred to the medical team for further investigations which revealed primary hyperparathyroidism with vitamin D deficiency (iPTH 705 pg/ml, 25 (OH) vitamin D 25 nmol/L, alkaline phosphatase 543 U/L). Clinically, no neck mass was observed but the neck detected a TIRADS 5 nodule in the right thyroid. Given the discordant clinical and sonographic findings, Tc99m Sestamibi SPECT/CT was arranged but she defaulted. Subsequently, she was admitted for severe hypercalcemia manifesting as severe bone pain and requiring saline-forced diuresis and intravenous zolendronic acid. Tc99m Sestamibi SPECT/CT scan demonstrated a parathyroid adenoma measuring 2.2 x 2.6 x 2.9 cm posterior to the right thyroid gland. Further imaging work-up showed bilateral medullary nephrocalcinosis and osteopenia. She underwent urgent right hemithyroidectomy, right superior parathyroidectomy and central neck dissection successfully. Postoperatively she developed hungry bone syndrome which required intravenous calcium infusion together with high dose activated vitamin D and calcium supplements. Histopathological report confirmed the diagnosis of parathyroid carcinoma with lymphovascular and capsular invasion. Postoperatively she was scheduled for PET-CT scan but she defaulted the follow-up. She is currently pregnant.

CONCLUSION

Parathyroid carcinoma is an indolent but progressive disease. Surgery is the mainstay of treatment. Early detection with attempts to remove local recurrence and distant metastasis can provide good short- and long-term control.

EP_A095

SEVERE HUNGRY BONE SYNDROME, COULD WE HAVE PROGNOSTICATED IT BETTER? A CASE SERIES

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INTRODUCTION/BACKGROUND

Hungry bone syndrome (HBS) is characterized by serum calcium less than 2.1 mmol/L and/or prolonged hypocalcaemia more than four days following parathyroidectomy or thyroidectomy. Here, we report two cases of HBS following parathyroidectomy for primary hyperparathyroidism (PHPT).

CASE 1

A 17-year-old female was diagnosed with PHPT when she presented with bilateral femoral neck and humeral fractures. Her serum calcium was 3.69 (2.2-2.65 mmol/L),