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 m^2 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.

CONCLUSION

This is a case of uterine clear cell carcinoma arising from endometriosis complicated with hypercalcemia and highlights that hypercalcemia may be the sole sign of disease transformation, despite the well-established aggressive nature of the disease. It is then crucial to perform a timely and thorough assessment, followed by appropriate management.

EP_A085

A GIANT PARATHYROID ADENOMA

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INTRODUCTION/BACKGROUND

Giant parathyroid adenomas, defined as adenomas weighing >3.5 gm, are rare, comprising a small fraction of all parathyroid adenomas. We describe a patient who presented with a giant parathyroid adenoma and markedly elevated parathyroid hormone.

CASE

A 57-year-old male, with a family history of adrenal Cushing's syndrome and hyperthyroidism, was incidentally diagnosed with primary hyperparathyroidism during admission for cerebral infarction, with hypercalcemia (3.2 mmol/L), elevated intact parathyroid hormone (iPTH) (140.2 pmol/L), and vitamin D deficiency (46 nmol/L). He was treated with saline diuresis, subcutaneous denosumab 60 mg, and subcutaneous calcitonin 200 U BD, but defaulted to further workup.

Nine months later, he returned with altered sensorium, hypercalcemia (3.43 mmol/L) and elevated iPTH (448.9 pmol/L), the same treatment was given as in the previous admission. Ultrasound of the parathyroid showed an interior hypoechoic lesion measuring 2.0 x 2.6 x 3.2 cm. Tc-99m Sestamibi scan suggested a left inferior parathyroid lesion without an ectopic tissue. DXA scan showed osteoporotic changes in the distal third radius and femoral neck. KUB Ultrasound showed no renal calculi. One month later he was admitted for hypercalcemia and acute kidney injury, treated with saline diuresis and subcutaneous denosumab 120 mg, and eventually underwent left inferior parathyroidectomy with intraoperative iPTH monitoring. From his highest pre-operative iPTH at 828 pmol/L, a reduction to 236.7 pmol/L was seen at 10-minutes post-incision. Intra-op findings showed a large left inferior parathyroid tumour, measuring 3.5 x 2.7 x 2.0 cm, weighing 14 gm. Histopathology was consistent with parathyroid adenoma. He was started on calcitriol and calcium carbonate post-operatively and did not develop hungry bone syndrome.

CONCLUSION

In giant parathyroid adenomas, a disproportionate rise in serum iPTH may result from factors like vitamin D deficiency, chronic iPTH elevation, or resistance to physiological effects of PTH. Distinguishing them from parathyroid carcinoma is challenging due to shared high iPTH and calcium levels, though studies showed that giant parathyroid adenomas may be asymptomatic. Histopathological examination is essential for diagnosis, warranting early surgical removal.

EP_A086

BONE HEALTH ASSESSMENT AMONG PROSTATE CANCER PATIENTS TREATED WITH ANDROGEN DEPRIVATION THERAPY IN A TERTIARY CENTRE IN MALAYSIA

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INTRODUCTION/BACKGROUND

Androgen deprivation therapy (ADT) is the cornerstone of treatment for castration-sensitive Prostate Cancer (PCa). However, the use of ADT can negatively impact bone health. This study aims to assess the prevalence of osteoporosis and osteopenia in men with PCa who have undergone ADT and identify any potential factors associated with osteoporosis among this population.

METHODOLOGY

This single-centre, cross-sectional study recruited 107 PCa patients treated with ADT at the Urology Unit, Hospital Sultanah Bahiyah from January 2020 to August 2023. Data collected included socio-demographics, comorbidities, treatment details and FRAX scores. Patients underwent Dual-energy X-ray absorptiometry (DEXA) scans and blood