deficiency, with a serum total 25-hydroxyvitamin D level of 46 nmol/L.

Ultrasound of the abdomen demonstrated bilateral medullary nephrocalcinosis, while neck ultrasound and Tc-99 m sestamibi parathyroid scintigraphy revealed a concordant lesion in the posterior aspect of the left thyroid lobe, suggestive of a parathyroid adenoma.

He returned 3 months later with closed fractures of the right subtrochanteric femur and the right humerus following a fall from standing height.

In view of persistent hypercalcemia despite hyperhydration and treatment with zoledronic acid, subcutaneous denosumab (60 mg) was administered, resulting in an improvement in serum calcium levels. A left inferior parathyroidectomy was then performed concurrently with internal fixation of the right femur. The surgery was uneventful. Histopathological examination confirmed an atypical parathyroid adenoma. Postoperatively, the serum calcium and iPTH levels normalized, and the patient remained asymptomatic and normocalcemic during regular follow-up.

CONCLUSION

APA remains a diagnostic and therapeutic challenge due to its clinical, biochemical, and histopathological features of equivocal malignancy. Surgical resection remains the mainstay of management of APA, and long-term surveillance is essential in view of its uncertain malignant potential and risk of recurrence.

EP_A110

BEYOND MTC: CLINICAL MANIFESTATIONS OF MEN2A IN HEREDITARY MEDULLARY THYROID CANCER PATIENTS IN A TERTIARY CENTRE

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INTRODUCTION

Medullary thyroid carcinoma (MTC) has the highest familial predisposition syndrome of any hereditary cancer syndrome. The most common subtype of hereditary MTC is multiple endocrine neoplasia type 2A (MEN2A), which is an autosomal dominant syndrome characterized by MTC, pheochromocytoma, and primary hyperparathyroidism (HPP). This study evaluates the genotypic distribution, phenotypic manifestations, and clinical characteristics of MEN2A within a retrospective MTC cohort.

METHODOLOGY

A retrospective audit of MTC patients was conducted at a tertiary centre. Patients with clinically or genetically confirmed hereditary MTC were identified for further analysis. Electronic medical records were reviewed for demographic data, RET germline mutations, occurrence of pheochromocytoma and HPP, laterality of disease, and documented surgical interventions.

RESULTS

In all, 18 patients (31.6%) were classified as hereditary from a cohort of 57 patients with a median age at diagnosis of 29.2 years. Among genetically confirmed cases with available variant data (n = 11), mutations predominantly involved exon 11 codon 634 (90.9%, n = 10), including p.Cys634Arg (n = 4), p.Cys634Tyr, and p.Cys634Ser, with one codon 618 mutation.

Extrathyroidal manifestations were common. Pheochromocytoma occurred in 50.0% (n = 9), of which 77.8% (n = 7) were bilateral. Most patients underwent adrenalectomy, including bilateral procedures in those with bilateral disease. HPP was identified in 44.4% (n = 8), managed with selective parathyroidectomy. Both pheochromocytoma and HPP were present in 22.2% (n = 4), while isolated MTC occurred in 27.8% (n = 5).

CONCLUSION

Hereditary MTC in our cohort is predominantly associated with high-risk codon 634 RET mutations and demonstrates substantial penetrance of pheochromocytoma and HPP. The high frequency of bilateral adrenal involvement highlights the importance of systematic biochemical surveillance and appropriately timed surgical management in MEN2A. A nationwide registry would be timely.

EP_A111

SAFETY AND CLINICAL OUTCOMES OF RAMADAN FASTING IN PATIENTS WITH ARGININE VASOPRESSIN DEFICIENCY: A RETROSPECTIVE COHORT STUDY

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INTRODUCTION

Arginine vasopressin deficiency (AVP-D) is characterized by impaired antidiuretic hormone secretion, leading to polyuria and a significant dehydration risk. The British Islamic Medical Association classifies AVP-D as a "very high risk" condition, advising against Ramadan fasting.

However, many patients fast due to religious convictions, creating a gap between clinical guidelines and patient practice. This study evaluates the clinical outcomes and safety of fasting in this population.

METHODOLOGY

A single-centre retrospective cohort study was conducted at Hospital Putrajaya. We included adults with permanent AVP-D on desmopressin therapy for more than 1 year who fasted during Ramadan 2025. Data were extracted from electronic medical records and patient consultations. Primary outcomes included hospitalization rates, dehydration symptoms, and desmopressin dose adjustments.

RESULTS

Of the 43 patients (mean age 42.4 ± 15.28 years; 53.5% female), 27 successfully fasted for a mean of 27.6 ± 6.56 days. Pre-Ramadan counseling was documented in only 55.8% of cases. While 25.9% of participants experienced dehydration symptoms (thirst, dizziness), and 22.2% broke their fast for safety reasons, there were no hospitalizations. None of the patients required additional desmopressin dose adjustments. Most patients (66.7%) maintained twice-daily desmopressin dosing (Sahur and Iftar). Anterior pituitary deficiencies were present in 70.3% of the cohort.

CONCLUSION

Despite being classified as very high risk, many AVP-D patients safely complete Ramadan fasting without severe adverse events. However, the high rate of dehydration symptoms and the significant gap in pre-Ramadan counseling (44.2% un-counseled) highlight the need for structured clinical reviews 4–6 weeks prior to Ramadan to optimize hydration and dosing.

EP_A112

A CASE SERIES OF CARCINOID SYNDROME: A SINGLE-CENTRE EXPERIENCE

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INTRODUCTION

Carcinoid syndrome is a hormonal complication accompanying neuroendocrine tumors (NETs) and is defined by chronic diarrhea and/or flushing in the presence of systemically elevated levels of serotonin or its metabolite 5-hydroxyindolacetic acid. The condition is often diagnosed late because of nonspecific symptoms, and many patients present with metastatic disease. This was a retrospective review of patients with carcinoid syndrome who were followed up at the Endocrine Clinic, Putrajaya Hospital, up to date.

CASE

Three women aged between 30 and 40 years were diagnosed with carcinoid syndrome secondary to metastatic NETs. Two cases were diagnosed before and during their pregnancies, resulting in one successful pregnancy while another required termination of pregnancy. All patients presented with symptomatic disease, predominantly flushing and chronic diarrhea and abdominal distension, leading to the diagnosis within the same year to as long as a decade after symptomatology. All were found to have extensive liver and nodal metastases at diagnosis. Liver biopsy showed tumor grade 1 in two of the cases, while the case with tumor grade 2 exhibited an aggressive disease course with carcinoid heart disease and bone metastases. None were amenable to surgery. Somatostatin analogues (SSAs) were the mainstay of treatment, administered every 2–4 weeks and titrated according to clinical response. Cytotoxic chemotherapy and bone-targeted agent were given for the case with rapid disease progression and skeletal-related event. Somatostatin analogue radiolabeled peptide therapy (PRRT) was reserved for symptom control in progressive disease refractory to first-line SSAs, after assessment with PET-Ga68 DOTATATE imaging.

CONCLUSION

This case series highlights delayed diagnosis and advanced presentation due to its nonspecific symptoms. The occurrence in young women, including during pregnancy, underscores the complexity of management and the need for individualized multidisciplinary care, with somatostatin analogues, systemic therapy, and PRRT playing key roles in symptoms control and disease progression.

EP_A113

AORTIC DISSECTION: A RARE COMPLICATION IN ACROMEGALY

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INTRODUCTION

Aortic root dilatation is not uncommon in acromegaly as a result of persistent growth hormone (GH) excess, causing degenerative changes in the aortic wall. Acute and extensive aortic dissection is rare and a potentially fatal complication.