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.

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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.