well with no galactorrhoea, headache or visual deficit. The hormonal evaluation revealed hyperprolactinemia (11,131 mIU/L) and hypogonadotropic hypogonadism (estradiol: 64.9 pmol/L, FSH: 7.2 mIU/L). Magnetic resonance imaging (MRI) demonstrated a cystic lesion occupying the pituitary fossa and extending into the suprasellar region; likely Rathke's cleft cyst with possible concomitant presence of pituitary adenoma. The lesion is abutting the optic chiasm with a height of 15.8 mm. She was treated with cabergoline 0.5mg twice per week. Her prolactin level normalized 3 months later with the resumption of a normal menstrual cycle. However, she defaulted to subsequent follow-up for 1 year before presenting to the endocrine clinic again for galactorrhoea and irregular menstruation. Prolactin level was 2,861 mIU/L. Cabergoline was re-initiated at 0.5 mg twice per week and her symptoms resolved 6 months later with the prolactin level of 311 mIU/L. Repeat MRI showed a right pituitary gland lesion measuring 0.4 x 0.3 x 0.3 cm with no cystic lesion identified.

CONCLUSION

Initial management strategies for cystic prolactinomas have been debated. In a recent review of cystic prolactinoma patients, 80% with compression of the optic chiasm evident on MRI (mostly without visual field defect) at presentation achieved resolution of chiasm compression with medical treatment. This case highlighted the effectiveness of cabergoline in treating cystic prolactinomas.

EP_A051

ENDOSCOPIC ULTRASOUND-GUIDED RADIOFREQUENCY ABLATION USED IN THE TREATMENT OF INSULINOMA

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INTRODUCTION/BACKGROUND

Surgical excision used to be the mainstay of curative treatment for insulinoma. In recent years, endoscopic ultrasound-guided radiofrequency ablation (EUS-guided RFA) has been used as a curative technique for insulinoma. Here, we report 2 cases of insulinoma with solitary lesions which showed clinical improvement following treatment with EUS-guided RFA.

CASE

The first case involved a 43-year-old Malay male, non-diabetic, who came with reduced consciousness during the fasting month of Ramadan. A low random blood sugar of 1.4 mmol/L was accompanied by elevated insulin (8.3 mIU/L) and C-peptide (427 pmol/L). Contrast-enhanced CT showed a pancreatic lesion in the body measuring 1.4 x 1.6 cm. EUS confirmed the presence of a 1.5 cm hypoechoic lesion at the same location. He underwent 3 cycles of EUS-guided RFA without any complications. After the second cycle of RFA, diazoxide was discontinued and there was no recurrence of hypoglycaemia.

The second case involved a 59-year-old male who presented with recurrent episodes of giddiness and sweating for the past 1 year. Each episode resolved with food intake. A 72-hour prolonged fast revealed hyperinsulinaemic hypoglycaemia (RBS 2.3 mmol/L, elevated insulin 1064 pmol/L and elevated C-peptide 94.7 pmol/L). Insulin autoantibody was negative. Initial imaging with contrast-enhanced CT and ^{68}Gallium-DOTATATE scan failed to localize any pancreatic lesion. However, subsequent EUS detected a lesion at the pancreatic neck measuring 1.0 x 1.2 cm. Fine needle aspiration reported a pancreatic neuroendocrine tumour with positive staining for chromogranin and synaptophysin. He underwent 3 cycles of EUS-guided RFA without complications. His hypoglycaemia symptoms resolved after the 3rd cycle of RFA.

CONCLUSION

EUS-guided RFA can be a potential consideration in treating insulinoma with solitary lesions <2 cm with no evidence of metastasis. It is minimally invasive with low periprocedural complication risk. Longer follow-up is needed in both patients to assess long-term clinical effectiveness and recurrence.

EP_A052

SUCCESSFUL RESOLUTION OF THYROID STORM FROM TSHoma WITH SOMATOSTATIN RECEPTOR LIGAND

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INTRODUCTION/BACKGROUND

Thyroid-stimulating hormone (TSH)-secreting pituitary adenomas (TSHomas) account for 2% of all pituitary adenomas. Symptoms of hyperthyroidism are common but thyroid storm is extremely rare. We report a case of TSHoma complicated by thyroid storm that was managed with somatostatin-receptor-ligand (SRL).

CASE

A 76-year-old male with TSHoma measuring 15 mm x 15 mm x 14 mm was conservatively managed for 5 years with cabergoline as he refused surgery. He presented early this year with fever, atrial fibrillation with rapid ventricular response and pneumonia requiring non-invasive ventilation. Burch-Wartofsky score was 60, consistent with thyroid storm. His fT4 and fT3 were 69.8 pmol/L (11.5-22.7 pmol/L) and 21.7 pmol/L (3.5-6.5 pmol/L) respectively. TSH was inappropriately normal at 3.74 mIU/L (0.55-4.78mIU/L). In intensive care, intravenous octreotide infusion at 50 mcg/hour was commenced. After 48 hours, ft4, ft3 and TSH reduced to 46pmol/L, 6.8 pmol/L and 0.52 mIU/L, respectively. Intravenous octreotide was converted to subcutaneous short-acting octreotide, titrated up to 100 mcg TDS. Glucocorticoids, carbimazole and betablockers were also used. After 5 days, his fT4, fT3 and TSH markedly reduced to 18.7 pmol/L, 4.2 pmol/L and 0.32 mIU/L, respectively. He was then overlapped with subcutaneous long-acting lanreotide. Repeat imaging showed unchanged size and extent of the macroadenoma. Despite re-counselling for surgery, he opted for long-term lanreotide and remains controlled to date.

Only three cases of TSHoma complicated by thyroid storm have been reported. In all cases, thyroid storm occurred after transsphenoidal surgery. Thionamides and beta-blockers were the mainstay of therapy. To our knowledge, our case is the first to use intravenous octreotide infusion in the acute management of thyroid storm. As TSHomas express somatostatin receptors (SSTR), especially SSTR 2 and SSTR 5, SRLs target these receptors to reduce TSH secretion.

CONCLUSION

Thyroid storm is an extremely rare complication of TSHoma. In this case, the use of short-acting SRL in conjunction with short-term antithyroid drugs, glucocorticoids and beta-blockers were efficacious in the acute management of this emergency.

EP_A053

PITUITARY METASTASIS: A RARE PRESENTATION OF SMALL CELL LUNG CANCER

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INTRODUCTION/BACKGROUND

The pituitary gland is a rare site for metastasis, with breast and lung cancers being the most common primary malignancies implicated in such instance. Most pituitary metastasis are clinically silent and diagnosed incidentally during radiological evaluation of brain metastasis.

CASE

We describe an elderly male, who had advanced small cell lung carcinoma diagnosed after his initial presentation of left cerebellar and pituitary metastatic lesions.

A 77-year-old ex-smoker complained of headache and vomiting for six months. Brain MRI showed a left cerebellar cystic lesion (3.9 x 4.6 x 3.3 cm) with mass effect. Additionally, a lobulated pituitary mass with posterior pituitary involvement and suprasellar extension was seen (1.3 x 1.3 x 1.0 cm and 1.2 x 1.4 x 1.0 cm for sellar and suprasellar components respectively). Following excision of the left cerebellar lesion, the patient was discharged. Ten days later, he was readmitted for hospital-acquired infection with transient hypotension. Stress dose of hydrocortisone was commenced for a low morning cortisol of 81.8 nmol/L. Both subnormal TSH (0.047 mIU/L; Normal: 0.35 – 4.94) and free T4 (8.59 pmol/L; Normal: 9.01 – 19.05) were attributed to sick euthyroidism. Prolactin was slightly elevated. There was no diabetes insipidus. A right upper lobe lung mass with mediastinal and right hilar lymphadenopathy were evident from contrast-enhanced CT thorax, abdomen, and pelvis. Endoscopic ultrasound guided fine-needle biopsy of aortopulmonary node was performed. Histopathological examinations of both specimens (aortopulmonary node and cerebellar mass) were consistent with small cell lung carcinoma. He subsequently underwent whole brain radiotherapy. Unfortunately, he passed away during the treatment course.

CONCLUSION

Pituitary metastasis is rare and exhibits a predilection for the posterior pituitary. Clinical manifestations of pituitary metastasis, if present, include visual field defects, cranial