

**CONCLUSION**

Women with GDM who have an elevated AUC glucose, previous insulin-requiring GDM and are of Chinese ethnicity are at higher risk of requiring insulin therapy.

**PP-55****OSTEOPOROTIC FRACTURE IN ADRENAL CUSHING'S: IS IT UNCOMMON?**

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**INTRODUCTION**

Osteoporosis is a known complication of Cushing's syndrome (CS). The prevalence of osteoporosis due to endogenous CS has been reported to be 50–59% and about one-third to half of patients with hypercortisolemia-induced osteoporosis experience fragility fracture. We described a case of CS due to Left Adrenal Adenoma complicated with T12 Fracture.

**RESULTS**

A 25 year-old Malay female presented with 7 months history of amenorrhea. Clinical examination revealed significant hirsutism, acne, purple striae over abdomen and marked proximal myopathy. Her fasting blood sugar was 8.2 mmol/L. She was treated as Polycystic Ovarian Syndrome (PCOS) by gynaecologist and started on oral contraceptive pill (OCP). She was referred to us for further work up of CS, but it was planned after we wash out the OCP.

She was admitted for severe lower back pain with bilateral sciatica. Further history revealed that she had history of fall 3 months earlier but was asymptomatic. Clinical assessment with imaging confirmed T12 fracture with compressive myelopathy involving the nerve roots. Adrenal and spine MRI was done in view of clinical suspicion of CS, which showed that the left adrenal is homogeneously enlarged with lobulated margin measuring 2.6 cm x 2.8 cm x 3.0 cm. Her CS was confirmed biochemically with a raised 24-hour Urinary Cortisol at 1345nmol level. Her morning cortisol was 738.2 nmol/L which is elevated while her serum Adrenocorticotrophic hormone was suppressed at <1.10 pmol/L. She proceeded with pedicle screw fixation of her T12 spinal fracture at first and later underwent left adrenalectomy with HPE report of Adrenal Cortical Adenoma with ganglioneuromas.

**CONCLUSION**

Literature have shown that osteoporosis is more prevalent in adrenal than pituitary CS. A retrospective analysis has shown that age, body mass index, duration of amenorrhea, extent of hypercortisolism do not significantly affect the prevalence of osteoporosis in CS.

**PP-56****TWO CASES OF IMMUNE CHECKPOINT INHIBITOR INDUCED THYROIDITIS FROM UNIVERSITY MALAYA MEDICAL CENTRE**

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**INTRODUCTION**

Immune checkpoint inhibitor (ICPi) is a known but rare cause of thyroiditis. However, there is a lack of local evidence due to scarce availability of ICPI as a novel treatment for oncology patients. We presented two cases of thyroiditis following treatment with PD-1 checkpoint inhibitors (anti-PD-1) namely pembrolizumab and cemiplimab.

**RESULTS**

Case A was a 49-year-old female who received pembrolizumab for recurrent metastatic HER2-negative breast cancer after mastectomy, radiotherapy and chemotherapy. Her thyroid function test at baseline was free T4 17.2pmol/L (normal range: 11.5-22.7) and TSH 0.63 mIU/L. After 3 weeks of pembrolizumab, she had biochemical hyperthyroidism (free T4 45.5 pmol/L; TSH <0.01 mIU/L), mildly raised thyroid stimulating immunoglobulins (0.94 IU/L; normal range: <0.55) and a normal thyroid ultrasound. She was treated with tapering dose of carbimazole 20mg daily but developed hypothyroidism (free T4 4.2 pmol/L; TSH 61.55 mIU/L) 5 weeks later while on carbimazole 5mg daily. She remained clinically and biochemically euthyroid with levothyroxine 100 mcg daily. Case B was a 63 year-old male who received cemiplimab for non-small-cell lung cancer with brain metastases after stereotactic brain surgery. He was euthyroid at baseline (free T4 -NA; TSH 0.55 mIU/L). After 3 months of cemiplimab, he had deranged thyroid function test (free T4 23.9 pmol/L; TSH 0.03 mIU/L), which progressed to biochemical hypothyroidism (free T4 7.5 pmol/L; TSH 49.61 mIU/L) 10 months later. He was treated with levothyroxine 25 mcg daily with latest free T4 15.4pmol/L and TSH 18.12 mIU/L

**CONCLUSION**

Thyroid function test screening is required for all patients undergoing treatment with ICPI. Clinicians need to have a high index of suspicion for ICPI-associated thyroid dysfunction which can be appropriately treated with medical therapy.