

factors and hence, be treated accordingly. Treatment of hyperthyroid patients with liver abnormalities is rather challenging as antithyroid drugs have been associated with liver injury. Various case reports showed remission of hyperbilirubinemia after radioactive iodine therapy. Therefore, radioactive iodine therapy should be offered as early as possible for patients with severe hyperbilirubinemia that is likely due to hyperthyroidism.

## EP\_A161

### BIZARRE THYROID FUNCTION TEST IN A PATIENT WITH MULTINODULAR GOITRE: A CASE REPORT

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#### INTRODUCTION/BACKGROUND

Multinodular goitres may be accompanied by various thyroid function abnormalities. Assessment of thyroid status and correct interpretation of thyroid function tests (TFTs) is important to ascertain the aetiology.

#### CASE

A 68-year-old female was referred for re-evaluation of abnormal TFT associated with a huge multinodular goitre. She was seen 3 years ago by a private practitioner due to progressive goitre enlargement since age 30 years. TFTs then showed markedly reduced fT4 at 1.3-3.6 pmol/L (12-22), with normal TSH at 0.3-0.65  $\mu$ IU/mL (0.27-4.2). She was started on L-thyroxine 100 ug daily based on these results, but she was only taking it intermittently. At the time of evaluation, there was no sign or symptom of hypothyroidism, but she complained of weight loss and irritability. On examination, she had a huge goitre with no lymphadenopathy. TFTs done showed low fT4, 8.6 pmol/L and TSH <0.005  $\mu$ IU/mL. Central hypothyroidism was ruled out by a paucity of signs of hypothyroidism with no accompanying hypopituitarism. Due to the persistent and markedly suppressed TSH (<0.005) but fT4 at a low normal limit, fT3 was assessed and was found to be elevated at 11-16.7 pmol/L (3.1-6.8). L-thyroxine was stopped.

Three months later, a repeat TFT off L-thyroxine still showed a very low fT4 at 1.94 pmol/L, but normal fT3 (5.02 nmol/L) and TSH (0.291  $\mu$ IU/mL). SHBG was normal at 52.4 nmol/L (16.8- 125.2) supporting euthyroidism. She remained well and euthyroid on subsequent follow-up with similar TFT but refused FNAC or surgical intervention for her goitre.

#### CONCLUSION

Low fT4 with normal TSH points towards central hypothyroidism but in patients with goitre and clinically euthyroid, disorders like iodine deficiency and thyroid dyshormonogenesis need to be considered. A T3 measurement should be done. A high T3/T4 ratio may be found in rarer entities such as resistance to thyroid hormone  $\alpha$  and has also been reported in follicular thyroid cancer due to increased thyroidal deiodinase activity.

## EP\_A162

### TUBERCULOUS MENINGOENCEPHALITIS MASKING MYXOEDEMA COMA

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#### INTRODUCTION/BACKGROUND

Myxoedema coma is a rare but potentially lethal complication of extreme hypothyroidism. Despite its low incidence, the mortality rate may reach 60%.

#### CASE

A 40-year-old male presented with shortness of breath, vomiting, frontal headache and abnormal behaviour for 2 days. He also suffered from fever, chesty cough, and chronic back pain for 2 weeks. He was confused, had unequal pupils, loss of lateral 1/3rd of his eyebrows, and reduced breath sounds bilaterally. Cranial CT scan demonstrated obstructive hydrocephalus necessitating external ventricular drainage. Pus aspirated from a right exudative pleural effusion yielded an ADA value of 68.78U/L. An MRI showed intracranial hyperintense lesions and L3/L4 spondylitis. Diagnosed with disseminated TB, anti-TB treatment with tapering doses of dexamethasone was commenced. He needed tracheostomy for prolonged intubation and had poor GCS recovery. On day 28 of hospitalization, he developed hypotension with a BP of 70/50 mm Hg, warranting noradrenaline infusion.

In retrospect, he had been bradycardic (heart rate ranged 30-55 bpm), hypothermic with a temperature of 35.7°C, and had recurrent hypoglycaemic episodes 7 days prior. Blood gas demonstrated CO<sub>2</sub> retention. Echocardiography did not exhibit pericardial effusion. His TSH level was >48.8 m IU/L, T4 level <3.2 pmol/L, and morning cortisol 163 nmol/L. He was administered IV Hydrocortisone 100 mg including IV Thyroxine 200mcg slow bolus. IV Thyroxine was then reduced to 100 mcg OD for 2 days and subsequently switched to an oral maintenance dose of 100 mcg OD. His