

## PA-A-47

### ROLE OF TEMOZOLAMIDE IN MACROPROLACTINOMA COMPLICATED BY DOPAMINE AGONIST INTOLERANCE AND REFRACTORY TO SURGERY: A CASE REPORT

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#### INTRODUCTION

Prolactinomas comprise approximately 40% of all pituitary adenomas, the majority of which are treated with dopamine agonists (DAs). Patients who fail conventional treatment may be considered for surgery or radiotherapy.

#### CASE

We describe a patient who was treated with temozolamide, an alkylating agent, following multiple DAs intolerances and unsuccessful surgery. A 43-year-old female with secondary amenorrhea, primary infertility and galactorrhea was diagnosed to have macroprolactinoma with a prolactin level of 8143 mIU/L (59-619 mIU/L). Pituitary MRI revealed a parasellar and cavernous sinus soft tissue lesion measuring 1.2 cm (AP) x 1.1 cm (W) x 0.8 cm (CC). Cabergoline was initiated and unfortunately, she developed severe headache and vomiting that necessitated hospitalisation. Similar problems occurred when cabergoline was switched to bromocriptine. Due to the side effects, she could not comply with her medications. The prolactin level gradually increased to 11636 mIU/L. Endoscopic transsphenoidal surgery was performed as a salvage treatment. Post-operatively, the prolactin level remained as high as 19722 mIU/L, complicated by secondary hypothyroidism and hypocortisolism. Temozolamide 150 mg/m<sup>2</sup> for 5 days every 28 days was initiated with monthly surveillance of parameters. She exhibited good tolerability. Following the 12th cycle of temozolamide, the prolactin was 3956 mIU/L, a rapid 80% reduction from the peak in 1 year.

#### CONCLUSION

Temozolamide is an effective alternative in treating prolactinoma after unsuccessful conventional modalities. Future research is needed to establish the role of temozolamide in the treatment algorithm.

## PA-A-48

### THYROID FUNCTION TEST IN SEVERE COVID-19 PATIENTS IN HOSPITAL SUNGAI BULOH

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#### INTRODUCTION

COVID-19 may have widespread effects throughout the body, including the endocrine glands, which can be impaired by different mechanisms. Several recent reports have described the onset of thyroid dysfunction in previously healthy patients diagnosed with COVID-19. Thus, we aimed to describe the pattern of abnormal thyroid function tests (TFTs) in severe COVID-19 patients in Hospital Sungai Buloh.

#### METHODOLOGY

Thyroid stimulating hormone (TSH) and free thyroxine (fT4) were received from all critical care wards catering for severe COVID-19 adult patients (Clinically Stage 4 and 5) from December 2020 till June 2021. It was retrospectively reviewed in Laboratory Information System (LIS) with exclusion of thyroid disease, pregnancy or immunotherapy. SARS-CoV-2 infection was confirmed by RT-PCR of nasopharyngeal swab samples and severity classification was based on the Malaysia MOH guideline. Analysis of TFT was performed on Siemens Atellica using chemiluminescent immunoassay

#### RESULTS

From 184 TFT results analysed, about 120 patients (65%) had abnormal thyroid function, of which 62.5% had low TSH level with normal fT4 and 15.8% had low TSH with high fT4. This indicated that abnormal TFT is common among COVID-19 patients, with low TSH being most common. However, we are unable to exclude steroid use as a cause of low TSH levels, as steroid are one of the main treatments prescribed in severe COVID-19 cases.

#### CONCLUSION

There was a high proportion of abnormal TFT in severe COVID-19 patients even in the absence of pre-existing thyroid conditions. Clinicians directly involved in treating these patients need to be vigilant in interpreting thyroid function abnormalities in COVID-19 infection.