on routine screening. At presentation, 50% (n = 7) were prepubertal and 36% (n = 5) were underweight, with mean BMI SDS −1.4 ± 1.2. All had high fT4 78.43 ± 72 pmol/L and suppressed TSH TRAb positivity was 86% (n = 12). Anti-TPO or anti-thyroglobulin antibodies positivity was 79% (n = 11). In one child, all three antibodies were negative. Thyroiditis was the commonest ultrasound finding. Carbimazole starting dose was 0.6 mg/kg/day and average treatment duration was 3.5 ± 2.4 years, which achieved biochemical euthyroidism in 49 days. Relapse rate on carbimazole was 57% (n = 8). No adverse effects occurred, and none had definitive therapy. Currently, 71% (n = 10) are euthyroid on a mean carbimazole dose of 0.2 mg/kg/day; one is off carbimazole. Current height is −1.1 ± 1.31 SD and BMI SDS −0.42 ± 1.7 SD respectively.

CONCLUSION

Graves' disease is the commonest form of paediatric hyperthyroidism in Negeri Sembilan, affecting prepubertal Malay females who commonly present with thyrotoxicosis. Carbimazole effectively achieves biochemical euthyroidism with minimal side effects. However, linear growth is affected. Future studies should evaluate the factors associated with these findings.

EP_P007

CLINICAL AUDIT OF CLONIDINE AS A FIRST-LINE PROVOCATIVE AGENT TO EXCLUDE GROWTH HORMONE DEFICIENCY IN CHILDREN WITH SHORT STATURE

Mazidah Noordin[1,2], Sook Weih Lew[1,2], Alexis Anand Dass[1,2], Jay Yin Lim[2], Noor Shafina Mohd Nor[1,2]
[1]Department of Paediatrics, Faculty of Medicine, Sungai Buloh Campus, Universiti Teknologi Mara (UiTM)
[2]Department of Paediatrics, Hospital Al-Sultan Abdullah, UiTM Puncak Alam, Universiti Teknologi Mara (UiTM)

INTRODUCTION

Clonidine is frequently utilized as a stimulus of growth hormone secretion to diagnose growth hormone deficiency in children. This clinical audit evaluates the efficacy and safety profile of clonidine as a sensitive, first-line screening agent to exclude GHD in children.

METHODOLOGY

A clinical audit was conducted on seven patients (4 females, 3 males) aged 7.1 to 12.3 years (median age 11.1) evaluated with clonidine stimulation test. The cohort included one prepubertal and six post-pubertal (highest tanner 2) children. Bone age was delayed at BA/CA ratio at 0.63–0.9 (median 0.8). Baseline IGF-1 levels ranged from 56 to 264 ng/mL. None of the children received sex steroid priming. A peak GH threshold of >10 ng/mL was utilized to exclude GHD. Safety profiles, specifically hemodynamic stability and level of consciousness, were actively monitored.

RESULTS

Clonidine effectively stimulated GH secretion and excluded GHD in six out of seven patients, yielding peak GH levels between 10.3 and 20.6 ng/mL. One patient with peak GH of 7.6 ng/mL with clonidine, and subsequent test with insulin tolerance test (ITT), confirmed GHD with a peak GH of 7.4 ng/mL. All participants (n = 7) experienced drowsiness. Hemodynamic adverse events were notable. Three patients experienced mild hypotension, and three patients developed clinically significant hypotension requiring normal saline fluid bolus.

CONCLUSION

Clonidine is a highly effective, sensitive first-line screening agent to exclude GHD, as it reliably stimulates GH peaks above diagnostic thresholds. However, close supervision is required due to drowsiness and the potential for severe hypotension requiring fluid resuscitation. Clinical judgment remains essential as secondary testing with another GH secretagogue is warranted when clinical suspicion persists.

EP_P008

CLINICAL OUTCOMES OF GONADOTROPIN-RELEASING HORMONE AGONIST THERAPY IN CHILDREN WITH CENTRAL PRECOCIOUS PUBERTY

Siti Zakiyyah Bakhtiar[1], Jia Nyuk Chong[1], Hooi Peng Cheng[2]
[1]Department of Pharmacy, Sarawak General Hospital
[2]Department of Paediatrics, Sarawak General Hospital

INTRODUCTION

Central precocious puberty (CPP) is the premature activation of the hypothalamic-pituitary-gonadal axis, often compromising adult height and psychosocial well-being. Timely treatment with gonadotropin-releasing hormone agonists (GnRHa) such as triptorelin is critical to halt pubertal progression and preserve growth potential. This study evaluated the clinical outcomes of triptorelin therapy in CPP at Sarawak General Hospital (SGH).

METHODOLOGY

A retrospective cross-sectional study was conducted among patients with CPP treated with triptorelin at the Paediatric Endocrine Clinic, SGH, including those currently receiving