a baby girl was delivered with a birth weight of 3.37 kg, length of 51 cm and OFC of 33 cm. She was intubated with ETT size 3.0 and ventilated in NICU. Examination showed a diffuse neck swelling measuring 3 x 3 cm. Ultrasound and CT scan showed an enlarged right thyroid lobe 3.5 x 2.7 x 4.2 cm (AP x W x CC) and a left thyroid lobe 3.1 x 2.8 x 4.3 cm (AP x W x CC) with no cystic component or calcification. Thyroid lobes extended up to the angle of the mandible and inferiorly until thoracic inlet with the airway and esophagus almost circumferentially encased and airway patency only maintained by ETT. Cord TSH 25.12 m IU/L, fT4 10.0 pmol/L, while Day 5 TSH 37.41 m IU/L, 6.47 pmol/L. ATPO, ATG & TSH receptor antibodies were negative. Her thyroglobulin level was low at 0.6 ng/ml (intact thyroid, 3.5-77.0). Her mother also reported onset of goitre following 1st trimester. She complained of tiredness and started taking Himalaya salt. Urine iodine results for patient and mother results were 322.7 ug/L and 221.3 ug/L, respectively (250 - 499, sufficient for pregnant mother). She was treated with L-thyroxine at day 5 of life at 50 mcg daily (15 mcg/kg) with serial ultrasound neck and flexible endoscopic assessment. She was successfully extubated by day 26 and discharged after 1 month. On follow-up, her goitre remained small with normal development and hearing. Due to cost constraint, genetic test was not pursued.

CONCLUSION

Neonatal goitre with hypothyroidism may result from maternal ingestion of antithyroid drugs or goitrogens, transplacental transfer of antithyroid antibodies, or thyroid dyshormonogenesis. Low thyroglobulin level with raised TSH and low fT4 suggest thyroglobulin synthetic defect.

EP_P011

A BOY WITH UNTREATED PANHYPOPITUITARISM: CASE REPORT

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INTRODUCTION/BACKGROUND

Hypopituitarism in childhood is a complex disorder with diverse clinical presentation which can either be congenital or acquired. Hormonal deficits can evolve over time leading to a significant impact on a child's growth.

We describe a case of untreated panhypopituitarism presenting as an adrenal crisis managed in a district hospital.

CASE

A 13-year-old Indonesian male with a background of panhypopituitarism post mature teratoma resection in January 2020 presented an adrenal crisis after he defaulted treatment for 2 years. On presentation, he had hypoglycaemia with shock requiring extensive fluid resuscitation and double inotropic support. Examination revealed weight and height below 3rd centile, pre-pubertal with thin eyebrows and depressed tendon reflexes. Height velocity was 4.2 cm/year for past 2 years. His random cortisol was extremely low (<1.5 nmol/L) with hypothyroidism. Intravenous stress dose hydrocortisone was initiated and his hemodynamic status improved over time. Oral thyroxine supplement was restarted and he required regular dose of sublingual desmopressin for diabetes insipidus.

CONCLUSION

Untreated panhypopituitarism has been reported in adult as late as 45 years old with significant impairment in cardiac function, growth and regression of sexual characteristic. With appropriate hormonal replacement, growth can be optimized and lifetime expectancy can be improved without long term sequelae.

EP_P012

DELAYED PRESENTATION OF PITUITARY TUMOUR WITH HYPOPITUITARISM

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INTRODUCTION/BACKGROUND

Hypopituitarism is a relatively uncommon disorder in the paediatric population, and its prevalence in children is not yet well established. This condition can be caused by any disease that affects the pituitary gland, stalk or hypothalamus. We describe a patient who presented late with short stature and hypopituitarism.

CASE

A 16-year-old male presented with short stature and delayed puberty. He denied any headaches or visual problems. He was born full-term with a birth weight of 3.2 kg. Developmental milestones were normal. At presentation, his height was 139 cm and his weight was 35 kg (both below 3rd percentile). Midparental height was 167.5 cm. His Tanner stage was 1 and testicular volume was 2 ml bilaterally. His visual field assessment was unremarkable. Hormonal analysis demonstrated

hypopituitarism as validated by the following: LH <0.12 IU/L (1.8-11.8 IU/L) FSH 0.8 IU/L (3.03-8.08 IU/L) fasting morning testosterone 0.32 nmol/l (0.69- 26.16 nmol/l), IGF-1 38.7 ng/ml (226-903 ng/ml), morning serum cortisol 158 nmol/l (102-558 nmol/l) with inappropriately normal ACTH 4.37 pmol/L (1.6-13.9 pmol/L) fT4 7.74 pmol/L (11.4-17.6) TSH 2.08 m IU/L (0.47-3.41) prolactin 671.28 m IU/L (72.6-407.4). Synacten test revealed inadequate response with peak cortisol 184 nmol/l at 60 minutes. His bone age was delayed between 11 - 13 years. Magnetic resonance imaging of the pituitary gland revealed the presence of an enhancing lesion at the suprasellar region, at the centre of the optic chiasm abutting the proximal part measuring 1.0 x 1.2 x 1.1 cm (AP x W x CC). Differential diagnosis includes craniopharyngioma or pilocytic astrocytoma. He was replaced with glucocorticoid and levothyroxine while awaiting a parental decision regarding tumour excision.

CONCLUSION

Hypopituitarism can present in neonates, infants, children, and adolescents with multifactorial aetiologies. Timely diagnosis of this condition is crucial for effective intervention and management of affected children. The key to successful management of hypopituitarism lies in a high index of suspicion, coupled with increased awareness and appropriate hormone replacement therapy. Access to facilities for surgical intervention is essential for the survival and good prognosis of affected children.

EP_P013

INCREASING TRENDS OF CENTRAL PRECOCIOUS PUBERTY AMONG CHILDREN IN HOSPITAL PUTRAJAYA, 2004 TO 2024: A DESCRIPTIVE STUDY

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INTRODUCTION/BACKGROUND

Temporal trends worldwide demonstrate evidence of an earlier onset and progression of puberty worldwide. This study aims to describe the trends in Precocious Puberty among children in Hospital Putrajaya between 2004 to 2024. Data retrieved from the electronic database were reviewed. All patients diagnosed to have precocious puberty (i.e., onset of puberty before age 8 years for girls and 9 years for boys) in the Department of Paediatric Endocrinology of Hospital Putrajaya from January 2004 until April 2024 were included (n = 89). These patients were stratified according to the diagnosis; children diagnosed with Idiopathic Central Precocious Puberty (CPP) and normal variant puberty (i.e., Premature thelarche (PT) or Premature Adrenarche (PA).

CASE

Overall, a total of 89 children (86 (96.6%) girls; median [interquartile] age at diagnosis for boys, 7 [6;10] years; for girls, 7 [2;9] years) were registered with a diagnosis of CPP, PT, PA. Majority were Malay, 54 (60.7%), 25 (28.1%) were Chinese, 8 (9%) were Indian and 2 (2.2%) were Nigerians. Majority of the cases were idiopathic CPP, 81 (91%); with a median [interquartile] LH:FSH ratio of 1.4 [0.16;7.23]. The MRI findings show normal findings in 30 (35.3%), pituitary microadenoma in 29 (34.1%), and pineal gland cysts in 1 (1.12%). There was a general increase in the number of cases of CPP over time; between 2013 to 2018; 23 (25.8%), and a greater rise between 2019 to 2024; 61 (68.5%). Nearly half of the cohort had a body mass index (BMI) of overweight or obese 40 (41.3%); with median [interquartile] bone age, 4 [2;7].

CONCLUSION

This study demonstrated an increase in the number of patients with central precocious puberty over 20 years. We also demonstrated a possible association with an increased BMI and earlier onset of puberty in girls.

EP_P014

OBESITY IN TEMPLE SYNDROME

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INTRODUCTION/BACKGROUND

Temple syndrome is a rare imprinting disorder caused by a maternal uniparental disomy of chromosome, paternal deletion of 14q32 or isolated methylation defect of the MEG3-DMR. Review of the electronic medical records with salient clinical and investigations recorded.

CASE

MKA is an 8 years and 5 months old male who presented with central hypotonia with poor sucking at birth. He was delivered term at 2.62 kg. Antenatally, the mother had oligohydramnios. During clinic follow-up, MKA remained well but he remained obese with a BMI of more than 97th centile. He looked dysmorphic with plagiocephaly, narrow bifrontal diameter, almond-shaped eyes, downturned mouth, thin upper lip, thick earlobes, small hands and feet, left single palmar crease, pes planus and genu valgus.