

## Paediatrics E-Poster

### CONCLUSION

The PRIS-NCD registry demonstrated high validity in recording T1DM patient data, supporting its use for epidemiological insights and healthcare planning. Rigorous data entry procedures likely aided high agreement rates. However, a broader evaluation of completeness, comparability, and timeliness will require nationwide implementation and real-time data capture. We recommend continued improvements in data entry practices and user education to sustain and enhance data quality.

### EP\_P005

#### PAIN ASSESSMENT AMONGST CHILDREN TREATED WITH DEEP INTRAMUSCULAR INJECTION OF GnRH $\alpha$ IN UMMC

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### INTRODUCTION

Trained nurses in our clinic routinely administer deep intramuscular injections of gonadotropin agonist (IM GnRH $\alpha$ ). Before the injections, we offer patients options for pain relief prophylaxis. However, we have not regularly assessed the type of pain or the effectiveness of pain relief prophylaxis.

### METHODOLOGY

This cross-sectional study was conducted from January to March 2025, involving all children who received IM GnRH $\alpha$  in the paediatric endocrine clinic at UMMC. The Wong-Baker pain scale, ranging from 0 to 10 (0 indicates no pain and 10 represents the most severe pain), was used to assess pain levels. The pain relief options offered included EMLA cream, ethyl chloride spray, ice packs, or any combination of these methods, based on patient preference. Cases were categorized as follows: New cases involved children who received three injections or less; intermediate cases involved those who received between four and nine injections; and long-term cases comprised those who received ten injections or more.

### RESULT

A total of 80 children received injections during the study period. The majority were female, 73 (91%). The mean age was 10.0  $\pm$  1.41 years. There were 24 (30%) new cases, 24

(30%) intermediate cases, and 32 (40%) chronic or long-term cases. The mean pain scores were 3.37  $\pm$  2.44 for new cases, 3.25  $\pm$  1.62 for intermediate cases, and 2.62  $\pm$  1.64 for chronic/long-term cases. The majority (68 or 85%) of patients chose a combination of EMLA and ethyl chloride spray. Other preferences included the spray alone (8 patients, or 10%), EMLA cream only (3 patients, or 3.75%), and EMLA cream with ice packs (1 patient, or 1.3%). Notably, only two patients in the chronic/long-term category opted for single therapy and reported a higher mean pain score of 5.

### CONCLUSION

We conclude that the more injections the patients received, the less pain they experienced, and that combination prophylaxis appears to be most beneficial. Further randomized studies are needed to determine the best pain relief method for children undergoing deep intramuscular injections in a clinical setting.

### EP\_P006

#### SECULAR TRENDS IN THE DIAGNOSIS AND MANAGEMENT OF TURNER SYNDROME: A SINGLE CENTRE 20-YEAR EXPERIENCE

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### INTRODUCTION

Turner syndrome (TS) is a sex chromosome disorder with one intact X chromosome and complete or partial absence of the second chromosome. It often involves multiple organ systems, predominantly various endocrinopathies, through all stages of life.

### METHODOLOGY

We performed a descriptive cross-sectional study in the Pediatric Endocrinology Unit Hospital Putrajaya. We retrieved records of all patients with TS managed in our unit between January 2005 and March 2025 from the electronic database system.

### RESULT

Over the past two decades, our unit has treated 72 patients with TS, with monosomy X being the most common karyotype abnormality, affecting 40 patients.

In the first decade, from 2006 to 2015, the median age at diagnosis was 5 years (IQR: 0.2 – 10.7 years). 63.3% (n = 19) were diagnosed during childhood, with short stature being

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the most common presenting complaint. The median age of referral to our unit was 9.5 years (IQR: 4.8 – 12.1). 83% (n = 25) had received recombinant growth hormone treatment (rhGH), and the median age at initiation of rhGH therapy was 11.1 years (IQR: 7.0 – 13.3). The median age of pubertal induction was 14.6 years (IQR: 13.1 – 15.3).

In contrast, during the second decade, from 2016 to 2025, patients were diagnosed earlier, with a median age of 2.6 years (IQR: 0.2 – 10.6). Notably, 54.7% (n = 23) were diagnosed antenatally or during infancy due to typical TS features. However, the median age at referral was 7.7 years (IQR: 4.0 – 11.6). During this period, 45.2% (n = 19) began rhGH treatment, with the median age for initiation at 9.0 years (IQR: 5.7 – 11.3). The median age for pubertal induction was 13.8 years (IQR: 13.6 – 14.8).

All the patients underwent complete screening for associated abnormalities.

### CONCLUSION

Referrals to a paediatric endocrinologist for Turner Syndrome are often delayed due to a lack of awareness of its various endocrinopathies. Early recognition of its salient features and prompt referral allows for timely intervention and management, predominantly growth hormone and sex hormone treatment, ultimately improving quality of life.

## EP\_P007

### PREVALENCE AND FACTORS ASSOCIATED WITH THYROID DYSFUNCTION AMONG PREMATURE BABIES IN A SELECTED TERTIARY CENTRE IN MALAYSIA

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### INTRODUCTION

Premature babies have a higher risk of developing thyroid dysfunctions due to immaturity of hypothalamic-pituitary-thyroid (HPT) axis. Rescreening of thyroid function is recommended in Malaysia among preterm babies  $\leq 34$  weeks gestation since 2022 to improve detection of thyroid dysfunction with delayed TSH rise. This study aims to analyse the prevalence and factors associated with thyroid dysfunction in preterm babies  $\leq 34$  weeks gestation and to evaluate its progression and outcome.

### METHODOLOGY

A retrospective study was performed among premature babies  $\leq 34$  weeks of gestation born between January 2019 until August 2024 in a selected NICU in Malaysia. Infants who had at least one repeated thyroid function test (TFT) after birth were included in the study. Data on the demographic factors and clinical characteristics were collected from the medical records. The TFT of the study population and its progression were analysed.

### RESULT

There were 14% (46/320) infants with thyroid dysfunction. The majority of infants with thyroid dysfunction had subclinical hypothyroidism 84.7% (39/46), followed by thyroid hypothyroxinemia of prematurity (THOP) 8.7% (4/46) and primary hypothyroidism 6.5% (3/46). Out of the 46 patients with thyroid dysfunction, 18/46 (39.1%) were detected at  $< 2$  weeks of life, 20/46 (43.5%) were detected at 2-4 weeks old and 8/46 (17.4%) were detected after 4 weeks old. In the evaluation of factors associated with thyroid dysfunction, only small for gestational age (SGA) was significantly associated with thyroid dysfunction compared to infants without SGA (28.2% vs 14.2%,  $p = 0.017$ ). Only 15/46 (32.6%) of infants with thyroid dysfunction required levothyroxine replacement, all of whom had primary and subclinical hypothyroidism. All infants with THOP had spontaneous resolution of thyroid dysfunction without treatment.

### CONCLUSION

The prevalence of thyroid dysfunction in preterm babies  $\leq 34$  weeks was 14%. The majority were detected between 2-4 weeks old. SGA was significantly associated with thyroid dysfunction in this study population.

## EP\_P008

### EVALUATING OUTCOMES OF CHILDHOOD OBESITY MANAGEMENT: A 2-YEAR FOLLOW-UP STUDY

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### INTRODUCTION

Childhood obesity (CO) clinic has served as screening and intervention center. Weight management programs in