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many later showed elevated PTH levels, suggesting secondary hyperparathyroidism. None of the subjects were found to be vitamin D deficient. Prolonged fasting was identified as a significant risk factor for severe MBDP. Most subjects received low calcium levels alongside relatively high phosphate in parenteral nutrition. Less than 25% of the infants received Human Milk Fortifier (HMF) despite being primarily breastfed. Only two subjects received calcium supplements.

CONCLUSION

The study highlights gaps in understanding mineral supplementation in MBDP and the underutilization of PTH screening. Routine phosphate supplementation without addressing calcium deficiency worsens secondary hyperparathyroidism and MBDP. The study recommends routine HMF usage, earlier PTH screening, and standardized guidelines to improve MBDP management.

EP_P003

HEALTH SCREENING ANALYSIS OF HIGH-RISK PRIMARY SCHOOL STUDENTS OF SK SEKSYEN 7, BANGI

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INTRODUCTION

Childhood obesity and metabolic disorders are growing concerns globally. This study examines the health status of primary school children in SK Seksyen 7, Bangi.

METHODOLOGY

We conducted a cross-sectional study on 116 high-risk primary school students (aged 10 to 12 years old). Anthropometric measurements (weight, height, BMI, waist circumference) and physiological parameters (blood pressure, blood glucose) were recorded. We also performed BMI classification and assessed their metabolic risk.

RESULT

Among the students, 78% were classified as obese, 13% were overweight, and only 9% had a normal body mass index (BMI). The glycemic results indicated that 97% of the students had normal glucose levels, while 3% were prediabetic. Additionally, only 20% of the students had a normal waist circumference measurement.

CONCLUSION

The findings highlight the importance of routine health screenings to detect early endocrine disorders in children. Early intervention strategies, including lifestyle modifications, are essential to prevent future metabolic complications.

EP_P004

VALIDATION OF DATA QUALITY IN THE MALAYSIAN PATIENT REGISTRY INFORMATION SYSTEM FOR TYPE I PAEDIATRIC DIABETES CASES

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INTRODUCTION

Type 1 Diabetes Mellitus (T1DM) is a significant chronic condition in children, yet Malaysia lacks comprehensive population-based data on its prevalence and clinical features. To address this, the Patient Registry Information System – Non-Communicable Disease (PRIS-NCD) was developed within the Malaysian Health Data Warehouse (MyHDW) to enable longitudinal data collection. This study aimed to evaluate the validity of PRIS-NCD data following pilot implementation in a national paediatric referral centre.

METHODOLOGY

One hundred twenty paediatric patients with T1DM under follow-up in Hospital Putrajaya were retrospectively notified into the PRIS-NCD registry. We assessed data validity by comparing 47 variables between registry entries and abstracted electronic medical records (EMR). The analysis focused on exact agreement rates and missing data percentages to determine concordance and completeness.

RESULT

Of 120 cases, 115 were included in the analysis. The mean exact agreement between the registry and EMR data was 95.4% at diagnosis and 94.7% at follow-up. Most variables showed agreement rates exceeding 90%, except for BMI at diagnosis (86.8%), insulin test at diagnosis (88.6%), and microalbuminuria at follow-up (68.3%). Missing data were generally low in both datasets, with registry data showing slightly fewer missing values compared to EMR data despite being a secondary source.

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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 α IN UMMC

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INTRODUCTION

Trained nurses in our clinic routinely administer deep intramuscular injections of gonadotropin agonist (IM GnRH α). 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 α 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 ± 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 ± 2.44 for new cases, 3.25 ± 1.62 for intermediate cases, and 2.62 ± 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