

therapy and those who had discontinued treatment. Demographic and clinical data were extracted from medical records and analyzed using SPSS version 25. Descriptive statistics summarized patient characteristics, while t-tests and non-parametric equivalents assessed treatment outcomes ($p < 0.05$ significant).

RESULTS

Eleven patients were included (mean age 6.88 ± 2.21 years; 90.9% female). Two patients (18.2%) were obese at initial diagnosis, and the mean baseline body mass index was 17.64 ± 2.25 kg/m². Most cases were idiopathic (54.5%), while pituitary microadenoma was identified in 36.4%. At diagnosis, the bone age was advanced by a mean of 3.51 ± 1.39 years. Six patients discontinued therapy: four after completion and two at parental request. Among completers, mean treatment duration was 3.21 ± 2.42 years, ending at a mean age of 10.13 ± 0.95 years. Final height did not differ significantly from mid-parental height ($p = 0.225$). Triptorelin significantly improved final height standard deviation score (SDS) ($p = 0.005$) and reduced the bone age/chronological age ratio ($p = 0.049$), though predicted adult height gains were not statistically significant ($p = 0.321$). No adverse effects were reported.

CONCLUSION

GnRHa therapy slowed pubertal progression and preserved growth potential in children with CPP, with favorable safety outcomes. Larger prospective studies are warranted to validate long-term benefits and identify predictors of optimal response.

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PAEDIATRIC GLUCOCORTICOID-INDUCED HYPERGLYCEMIA AND DIABETIC KETOACIDOSIS: AN UNDER-RECOGNIZED COMPLICATION OF CANCER THERAPY

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INTRODUCTION

Paediatric glucocorticoid-induced hyperglycemia (GIH) and diabetes are frequently under-recognized complications of cancer therapy. Early identification is essential, as delayed diagnosis may lead to severe metabolic consequences, including diabetic ketoacidosis (DKA). This study aims to characterize the clinical features, risk factors, and outcomes of GIH in a tertiary centre.

METHODOLOGY

A descriptive cross-sectional study was conducted at the Paediatric Endocrinology Unit, University Malaya Medical Centre, reviewing cases from January 2023 to December 2025. Data were extracted from electronic records, including demographic, clinical, and treatment-related variables.

RESULTS

Twelve cases of GIH or diabetes were identified, including two presenting with DKA. Most patients had leukemia (92%), with a male predominance (75%). The median age was 13.6 years, and the median body mass index was 22.1 kg/m². Over half (54%) were overweight or obese, and 45% exhibited acanthosis nigricans. A family history of diabetes was present in 75% of cases.

Hyperglycemia developed early in 66% of cases, typically within 2–5 days of initiating high-dose glucocorticoids. Median random blood glucose was 21.9 mmol/L, while median HbA1c was 6.4%. Half were symptomatic, most commonly with polyuria. Insulin therapy was required in 75% of cases, with a median duration of 26 days. Metformin was used in 50% of cases, often in combination with insulin. Most cases resolved following cessation of glucocorticoid therapy, except one who continues to receive metformin for a pre-diabetes state.

CONCLUSION

Adolescents, those with obesity, insulin resistance, and a positive family history of diabetes, represent high-risk groups for GIH. Importantly, GIH may present with life-threatening DKA. Routine glucose monitoring and risk stratification during glucocorticoid therapy are recommended. The development of local screening and management guidelines is crucial for improving early detection and optimizing patient outcomes.