

CONCLUSION

Despite the absence of a significant statistical difference, more patients presented with more severe DKA with longer recovery during the COVID-19 pandemic. A larger multi-centre study is needed to evaluate the magnitude of the impact of COVID-19.

EP_B005

DOES THE INCIDENCE OF DIABETIC KETOACIDOSIS IN PATIENTS WITH TYPE 1 DIABETES MELLITUS DIFFER DURING COVID-19 PANDEMIC?

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Syarifah Nursyazana Syed Ridzuan,¹ Amira Yasmin Mohamed Zaini,² Alexis Anandas Lordudass,² Azriyanti Anuar Zaini,² Nurshadia Samingan²

¹Paediatric Endocrine Unit, Department of Paediatrics, University Malaya Medical Centre, Malaysia

²Department of Paediatrics, Faculty of Medicine, Universiti Malaya, Malaysia

INTRODUCTION

Recent studies have observed increased numbers of newly diagnosed type 1 diabetes patients and higher incidence of diabetic ketoacidosis in T1DM patients during the COVID-19 pandemic. The care of non-COVID-19 patients was compromised due to the tremendous burden of managing critical cases of COVID-19 patients. However, this finding is not consistent. This study compares the incidence of DKA and its severity during the pandemic with the similar timing prior to it.

METHODOLOGY

This is a retrospective cross-sectional study on all of patients who were either newly diagnosed or pre-existing patients with T1DM aged one to 18 years old treated at University Malaya Medical Centre for DKA. from September 2017 until August 2022. Data on demographics, first DKA presentation, recurrence, severity, pediatric ICU admission, duration of recovery, COVID-19 status, duration from symptoms to presentation, and biochemical values were obtained.

RESULT

A total of 96 DKA cases were reported from September 2017 until August 2022. An equal number of DKA cases (48) was seen in each period. Fifty patients (69%) were newly diagnosed. Recurrent DKA occurred more during the COVID-19 period (27 versus 21). More patients presented with severe DKA during the pandemic (24 versus 19). Although not statistically significant, newly diagnosed T1DM presented with more severe DKA with lower pH

(7.05 versus 7.12, $p=0.417$) and took longer to recover compared to the pre-pandemic period (48 versus 36 hours, $p=0.150$). Three newly diagnosed patients were COVID-19 positive with COVID-19 Category 2b and presented in moderate to severe DKA.

CONCLUSION

There was no difference in the number and severity of DKA cases during the pre-pandemic and COVID-19 pandemic period. A larger-scale study is needed to analyse the impact of COVID-19 on the incidence and severity of DKA.

EP_B006

INSULIN ANTIBODY MEASUREMENTS: SHEDDING LIGHT ON HIRATA'S DISEASE

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Saraswathy Apparow,¹ Chin Voon Tong,² Chee Koon Low,³ Hui Chin Wong,³ Sy Liang Yong³

¹Endocrine Unit, Institute for Medical Research, Kuala Lumpur, Malaysia

²Endocrine Unit, Department of Medicine, Hospital Melaka, Malaysia

³Endocrine Unit, Department of Medicine, Hospital Tengku Ampuan Rahimah, Klang, Malaysia

INTRODUCTION

The Endocrine Society Clinical Practice Guideline recommends measurement of insulin autoantibodies (IAA) upon confirmation of endogenous hyperinsulinism. The differential diagnosis of endogenous hyperinsulinism include insulinoma, post-bariatric hypoglycaemia, nesidioblastosis and insulin autoimmune syndrome (IAS). IAS, also known as Hirata's disease, is a rare immune-mediated disorder characterised by hyperinsulinaemic hypoglycaemic episodes. It is increasingly being recognized in Malaysia because of accessibility to IAA testing.

CASE

We describe two cases of newly diagnosed IAS with varied clinical presentations and treatment approaches. The first patient is a 57-year-old male with Graves' disease who experienced severe and recurrent hypoglycaemia during fasting and postprandial states. The second patient is a 56-year-old female with hypertension and bronchial asthma who developed recurrent hypoglycaemia despite cessation of insulin therapy following the treatment for severe refractory diabetic ketoacidosis.

Laboratory findings for both patients showed elevated serum insulin and C-peptide during the hypoglycaemic event, with insulin/C-peptide ratio >1 . Pancreatic antibodies were negative. Serum insulin autoantibodies measured on