Adult E-Poster

EP_A175

EXPLORING THE IMPACT OF INSULIN DEINTENSIFICATION ON BODY WEIGHT AND GLUCOSE CONTROL IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

https://doi.org/10.15605/jafes.040.S1.183

Nur Aflyn Fatinah Faizal,[1,2] Ernieda Md Hatah,[1] Sarah Anne Robert,[3] Yeap Yoon See,[2] Afifah Azhari,[2] Noorlita Adam[4]

[1]*Faculty of Pharmacy, University Kebangsaan Malaysia, Kuala Lumpur, Malaysia*

[2]*Department of Pharmacy, Hospital Tuanku Ja'afar, Seremban, Malaysia*

[3]*Department of Pharmacy, Hospital Canselor Tuanku Mukhriz UKM, Kuala Lumpur, Malaysia*

[4]*Department of Endocrine, Hospital Tuanku Ja'afar,Seremban, Malaysia*

INTRODUCTION

Deintensification of insulin regimens and doses has potential to prevent overtreatment and hypoglycemia. This study aims to identify the characteristics and reasons for deintensification in Type 2 Diabetes Mellitus (T2DM) patients; to evaluate glycemic efficacy and to examine changes in body weight following deintensification and factors influencing these outcomes.

METHODOLOGY

A retrospective cohort observational study was conducted among T2DM patients from Hospital Tuanku Ja'afar and Hospital Canselor Tuanku Mukhriz. Data were collected from patient records receiving insulin deintensification from January 2020 to January 2024 using a data collection form with six sections.

RESULT

A total of 134 patients from two hospitals were included in this study, with 75 patients from HTJ and 59 patients from HCTM. The mean age was 57.25 ± 14.02 years, with an equal distribution of male and female participants. The majority were Malay (n = 69, 51.5%), followed by an equal number of Chinese and Indian (n = 32, 23.9% each), with most patients on a basal bolus regimen (n = 69, 51.5%), followed by a premixed (n = 63,47%) and a basal (n = 2,1.5%). The mean duration of diabetes was 17.54 ± 8.28 years. Baseline HbA1c was 9.38 ± 1.86% and most patients used insulin four times a day (n = 59, 44%). The mean total daily insulin dose decreased from 77.99 ± 30.18 units to 60.11 ± 25.39 units. Hypoglycemia events reduced from 98 to 11 episodes. The main reason for deintensification was hypoglycemic events (n = 98, 73.1%). HbA1c reduced from 9.38 ± 1.86% to 8.72 ± 1.78% (t (133) = 5.57, p <0.001), and weight decreased from 77.27 ± 15.83 kg to 75.80 ± 15.75 kg (t (133) = 6.19, p <0.001). Factors significantly associated with changes in HbA1c include baseline HbA1c (p <0.001), use of basal-only insulin (p = 0.002), and reduction in insulin injection frequency by one (p = 0.002) and two (p = 0.004) times per day.

CONCLUSION

Insulin deintensification significantly improves glycemic control and reduces body weight in T2DM patients. Key factors influencing these improvements include baseline HbA1c levels and the type and frequency of insulin used. Monitoring for signs of overinsulinization and hypoglycemia, particularly those with high HbA1c, is crucial for optimizing diabetes management.

EP_A176

THE PREVALENCE OF COGNITIVE IMPAIRMENT AMONG ADULTS WITH TYPE 2 DIABETES MELLITUS: A MULTI-CENTER CROSS-SECTIONAL STUDY

https://doi.org/10.15605/jafes.040.S1.184

Mohd Fyzal Bahrudin and Noor Rafhati Adyani Abdullah

Endocrine Unit, Medical Department, Hospital Sultanah Bahiyah, Kedah, Malaysia

INTRODUCTION

Cognitive impairment is increasingly recognized as a significant complication of type 2 diabetes mellitus (T2DM), affecting memory, executive function, and processing speed. Despite its clinical relevance, cognitive impairment in T2DM often remains underdiagnosed, leading to poor disease management, reduced adherence to treatment, and diminished quality of life.

METHODOLOGY

This cross-sectional study evaluated the prevalence of cognitive impairment among T2DM patients attending the Medical Outpatient Department (MOPD) and Integrated Diabetes Clinic at Hospital Sultanah Bahiyah and Hospital Sultan Abdul Halim, Kedah. Eligible participants were adults with T2DM, selected through convenience sampling. Cognitive function was assessed using the Montreal Cognitive Assessment (MoCA), and demographic data were collected.

RESULT

A total of 144 participants were included, comprising 88 females (61.1%) and 56 males (38.9%). The median age of participants was 56 years old. The majority were of