

中文題目：低血糖及低血糖不自覺在第二型糖尿病門診病患的流行病學分析：一個描述型研究

英文題目：The hypoglycemia and hypoglycemia unawareness in Type 2 diabetes mellitus patient at outpatient clinic: a descriptive study

作者：白哲聲^{1,2}，梁綉鈴²，林昆德^{2,3}

服務單位：高雄醫學大學附設醫院¹內科部，²內分泌新陳代謝內科，³高雄醫學大學醫學院

Background: Iatrogenic hypoglycemia remained a limitation of diabetes mellitus management, especially in whom given insulin, a sulfonylurea, or a glinide. Hypoglycemia-associated autonomic failure (HAAF), which impairs glucose counterregulatory response to hypoglycemia, plays an important role in recurrent hypoglycemia since it is related to hypoglycemia unawareness. This study is aimed to recognize specific characters in patients with type 2 diabetes mellitus(T2DM) having hypoglycemic event, which might contribute to our daily care to prevent this adverse result.

Method and material: Outpatient clinic T2DM patients were our target population. Finger sugar test was obtained before each appointment. Whose finger sugar below 70 mg/dL was managed immediately. We recorded the patients' profile including disease duration, gender, Body mass index (BMI), renal function, HbA1c, symptoms during the hypoglycemic event. We recorded blood sugar after management. Besides, repeated event was also recorded.

Result: During 2016-2019, 630 patients with type 2 diabetes mellitus was found having hypoglycemic event at outpatient clinic. We found that female population was significant higher compared to male in the group of asymptomatic hypoglycemia while the symptomatic group showed reverse result. Besides, we also found people with longer T2DM duration tended to have more recorded hypoglycemia event.

Discussion: In this study, we found that female tended to be asymptomatic during hypoglycemic event compared to female. Previous study indicated that female had reduced rate of endogenous glucose production during hypoglycemia, which might explain our finding. On the other hand, body responses to hypoglycemia was intact in early T2DM. However, the defense mechanism impaired over time. It might explain our finding that people with longer T2DM duration tended to have more recorded hypoglycemia event.

Conclusion: Our finding showed that female proportion are higher in the group of Impaired awareness of hypoglycemia. Besides, people with longer T2DM duration had more recorded hypoglycemia event. The result might suggest that we should pay more attention in T2DM

management in women who had longer disease duration to prevent hypoglycemia event.