



METHODOLOGY

This retrospective cohort study included patients who were prescribed with dulaglutide for at least 1 month between 2018 and 2020 at Theptarin Hospital, Bangkok, Thailand. Primary (change in A1C) and secondary (including change in body weight, glycemic and weight-loss target achievement) endpoints were assessed at baseline and at follow-up visit.

RESULTS

A total of 41 patients (females 51.2%, mean age 56.9±13.4 years, duration of diabetes 15.7±9.0 years, BMI 34.2±5.8 kg/m², baseline A1C 8.5±1.7%, SGLT2i-treated 48.8%, insulin-treated 51.2%, established ASCVD 9.8%) were included in the study. During a mean follow-up of 5.7 months after treatment initiation, the overall mean A1C reduction was 0.9% with weight loss of 2.3 kg. The proportion of patients who could achieve A1C < 7.0% increased from 12.5% to 31.4%. Among SGLT2i-treated patients, overall mean A1C reduction when compared with non SGLT2i-treated patients was 1.0 ± 1.3% and 0.8 ± 1.8%, respectively (p=0.716). Body weight reduction in SGLT2i users was -3.0 ± 4.7 kg while for non-SGLT2i users, it was -1.6 ± 3.4 kg (p=0.277). Reported adverse events were consistent with the known safety profile of GLP-1 RA.

CONCLUSION

In routine clinical practice among Thai patients with T2D, the combination of dulaglutide and SGLT2i was well tolerated and associated with sustained glycemic control and weight loss in a wide range of patients with T2D comparable with what has been observed in randomized clinical trials.

PP-D-14

ASSOCIATION BETWEEN ELEVATED PHASE ANGLE AND REDUCED RISK OF CHRONIC KIDNEY DISEASE PROGRESSION IN TYPE 2 DIABETES

<https://doi.org/10.15605/jafes.037.AFES.54>

Serena Low,¹ Sharon Pek,¹ Keven Ang,¹ Tavintharan Subramaniam,² Chee Fang Sum,² Su Chi Lim¹

¹*Khoo Teck Puat Hospital, Singapore*

²*Admiralty Medical Centre, Singapore*

³*Lee Kong Chian School of Medicine, Singapore*

⁴*Saw Swee Hock School of Public Health, Singapore*

OBJECTIVES

Phase angle (PhA) is a bioelectrical impedance analysis parameter defined as the angle of the vector formed by the body's resistance and reactance. It indicates nutritional status, with higher levels signifying healthier cell membrane and higher muscle mass. Currently, the association between PhA and chronic kidney disease (CKD) progression is unknown. Pigment epithelium-derived factor (PEDF) has anti-oxidant, anti-angiogenic and anti-inflammatory properties, and its circulating level may be elevated in CKD. We investigated the association between PhA and CKD progression, and the possible mediation of PEDF in this association among Type 2 Diabetes (T2D) patients.

METHODOLOGY

We conducted a prospective study on 868 patients (mean age 58.1 ± 8.6 years) from SMART2D cohort. PhA was measured using bio-impedance analysis. CKD progression was defined as deterioration across KDIGO estimated glomerular filtration rate (eGFR) categories with ≥25% decrease from baseline. Enzyme-linked immunosorbent assay was used to quantitate PEDF. We examined the association between PhA and CKD progression using Cox proportional regression, adjusting for demographics, clinical parameters and medications. This research has been approved by an ethical committee.

RESULTS

After a follow-up period of 8.6 years, 40.3% of participants had CKD progression. PhA is inversely associated with CKD progression with a hazard ratio (HR) of 0.69 (95% CI 0.61-0.79; p<0.001). The inverse association persists in fully adjusted analysis with HR 0.78 (95% CI 0.67-0.91; p=0.001). Binary mediation analysis revealed that PEDF accounted for 13.7% of association between PhA and CKD progression (p=0.028).

CONCLUSION

Our findings have revealed a previously unobserved association between higher PhA and reduced risk of CKD progression. This may pave the way for future studies on the role of PhA in monitoring renal decline.