RESULTS
During a median follow-up of 7.26 years, the incidence rate of ESRD was 2.03 per 1,000 person-years. In multivariable Cox proportional hazard modeling, the risk of the primary outcome was lowest in groups with an SBP of 100–119 mmHg and DBP of <80 mmHg. In a subgroup analysis according to the use of hypertension medication, there was a significant difference in DBP (p for interaction = 0.026) but no difference in SBP (p for interaction = 0.247). The risk of ESRD was the lowest in patients with an SBP of 110–129 mmHg taking hypertension medication and the highest in the group with an SBP of ≥160 mmHg.

CONCLUSION
Maintaining blood pressure at less than 120/80 mmHg might prevent progression to ESRD in older diabetes patients without cardiovascular disease.

KEYWORDS
hypertension, end-stage renal disease, systolic blood pressure, diastolic blood pressure, pulse pressure

PP-D-37

DIABETIC FOOT ULCER WITH TUBERCULOSIS INFECTION

https://doi.org/10.15605/jafes.038.AFES.106

Puspito Dewi,[1] Hemi Sinorita,[2] Heni Retnowulan,[2] Rizka Humardewayanti[2]
[1]*Faculty of Medicine Gadjah Mada University, Yogyakarta, Indonesia*
[2]*Dr. Sardjito General Hospital, Yogyakarta, Indonesia*

CASE
Diabetic foot ulcer (DFU) is one of the most common diabetes complications that increases morbidity, mortality and treatment costs while reducing the quality of life as well. We describe a case of a non-healing foot ulcer caused by Mycobacterium tuberculosis in a 52-year-old Indonesian male with known diabetes where the diagnosis was not suspected initially. Despite the administration of culture-guided antibiotics, the wound did not improve and always appeared wet. The patient eventually received anti-tuberculosis drugs, causing a dramatic improvement in the wound. Diabetes mellitus is indeed a disease that can alter the host's immunity and lead to increased susceptibility to several diseases, including tuberculosis. In TB-endemic countries, tuberculosis should be considered as a differential diagnosis in DFUs that do not improve despite culture-guided antibiotic treatment.

KEYWORDS
diabetic foot ulcer, non-healing wound, tuberculosis

PP-D-38

DIABETIC EMERGENCIES: COMBINED HYPEROSMOLAR HYPERGLYCEMIC STATE AND DIABETIC KETOACIDOSIS

https://doi.org/10.15605/jafes.038.AFES.107

Josephine Khaye Doydora and Emilia Patriana
Maria Reyna Xavier University Hospital, Cagayan de Oro, Philippines

CASE
There is no currently accepted definition for patients presenting with a combination of hyperglycemic hyperosmolar state and diabetic ketoacidosis. An overlap of both entities is associated with greater mortality than isolated HHS or DKA. We describe a case of a 69-year-old Filipino male with type 2 diabetes and dementia who presented with mixed HHS and DKA. The patient was tachycardic and tachypneic with dry oral mucosa and poor skin turgor associated with metabolic acidosis, ketonuria, elevated osmolarity, and anion gap. Non-adherence to insulin with concomitant atypical antipsychotic medication use may have precipitated the condition. Fluid repletion, insulin therapy, and correction of hyperosmolarity and acidosis resulted in the recovery of the patient without complications. This case highlighted the importance of defining management strategies for mixed types of diabetic emergencies to prevent mortality and morbidity.

KEYWORDS
type 2 diabetes, diabetic ketoacidosis, hyperosmolar hyperglycemic state, overlap

PP-D-39

CLINICAL RESULTS OF LONG-TERM LOBEGLITAZONE ADD-ON THERAPY IN TYPE 2 DIABETES

https://doi.org/10.15605/jafes.038.AFES.108

Yonghyun Kim and Donghyun Shin
Bundang Jesaeng Hospital, Seongnam, South Korea

INTRODUCTION
Considering the pathophysiology of type 2 diabetes, a metformin and DPP-4 inhibitor combination is the usual initial treatment option to relieve insulin resistance and improve insulin secretory dysfunction. Adding thiazolidinedione (TZD) was the next best step for delaying the progression of diabetes by preserving pancreatic beta cell function compared to sulfonylurea before launching of SGLT2 inhibitor. Lobeglitazone is another TZD launched in this country in 2016. This study wanted to determine the long-term effects of lobeglitazone when added to metformin and DPP-4 inhibitor combination therapy.

METHODOLOGY
We enrolled 196 patients who failed to reach the HbA1c target below 7% with metformin and DPP-4 inhibitor and were given add-on lobeglitazone. We checked the change in HbA1c and insulin resistance index between the groups on lobeglitazone segregated into those who discontinued the medication (stop group), who were lost to follow-up (lost group), and those who continuously took the medication (maintain group). Other clinical characteristics were also compared between groups.

RESULTS
The mean age and duration of diabetes was 61.4 and 10.1 years, respectively. The mean BMI was 26.6. The fasting c-peptide level was 2.62ng/mL and HOMA-IR was 3.87. The mean HbA1c level before add-on therapy was 7.82 ± 0.67. Lobeglitazone was discontinued in 56 patients after a mean of 3.5 years due to poor glucose control, while 51 patients were lost to follow-up. Ninety patients continued the medication for up to 5 years. HbA1c level after six months of add-on Lobeglitazone improved by 0.78 ± 0.99, 0.99 ± 0.98, and 0.92 ± 0.63 in each group. Initial HbA1c improvement was lower in those who stopped taking it. Diabetes duration was not different among the groups, but fasting C-peptide level and improvement of HOMA-IR were higher in those who maintained Lobeglitazone.

CONCLUSION
Lobeglitazone as an add-on to metformin and DPP-4 inhibitor combination was effective. The fasting C-peptide level and improvement of HOMA-IR were higher in the maintain group.

KEYWORDS
lobeglitazone, long term, combination, HOMA-IR

PP-D-40

COMPARISON OF THE CHRONIC KIDNEY DISEASE PROGRESSION IN TYPE 2 DIABETES BETWEEN DIABETES CLINIC AND INTERNAL MEDICINE CLINIC

https://doi.org/10.15605/jafes.038.AFES.109

Siwakorn Inkhong
Rajavithi Hospital, Bangkok, Thailand

INTRODUCTION
There was no study to compare the rate of chronic kidney disease progression among patients with diabetes consulting in diabetes and internal medicine clinics. The present study aimed to compare the rate of renal progression and the risk factors for chronic kidney disease among patients in the diabetes and internal medicine clinics to improve the management and delay progression of renal impairment.

METHODOLOGY
Data were collected in Rajavithi Hospital from January 1, 2017 to January 30, 2021 in the retrospective cohort study. The inclusion criteria were patients with type 2 diabetes mellitus and CKD stage 3a or 3b in diabetes and internal medicine clinics. Baseline characteristics included age, sex, body weight, body mass index, comorbidities, blood chemistries composed of estimated glomerular filtration rate (eGFR), microalbuminuria, low-density lipoprotein (LDL), fasting blood sugar (FBS) and hemoglobin A1c (HbA1c) as well as medication prescription comprising of angiotensin-converting enzyme inhibitors (ACEIs) or angiotensin receptor blockers (ARBs), sodium-glucose cotransporter type 2 (SGLT2) inhibitor, glucagon-like peptide-1 receptor agonist (GLP-1 RA) and statins. In addition, data from nephrology consultations were also collected. The primary outcomes were GFR change and CKD stage progression after two years of follow-up.

RESULTS
The number of patients who had CKD stage progression for two years who were treated in a diabetes clinic was significantly lower than those treated in an internal medicine clinic (37.1% [n = 124] vs. 52.7% [n = 184], p <0.001) and the mean GFR change after two years was significantly different (-6.30 ± 4.21 vs. -8.51 ± 5.14, p <0.001). After adjusting for covariates in repeated measurement analysis, it was found that the GFR decline and CKD stage progression was slower in patients treated in the diabetes clinic than in those treated in the internal medicine clinic but the difference was not statistically significant. Patients using ACEIs or ARBs, statin, SGLT2 inhibitors, and GLP-1 RA and seeing nephrologists were significantly higher in the diabetes clinic than internal medicine clinic.

CONCLUSION
No significant difference was observed in the change of GFR or CKD stage progression between patients treated in the diabetes clinic and those treated in the internal medicine clinic, during the two-year follow-up period of our study. Further studies with longer follow-up periods are needed to investigate the long-term treatment outcomes for renal impairment in these patient populations.

KEYWORDS
chronic kidney disease, diabetes clinic, Internal medicine clinic, type 2 diabetes mellitus