

## 00345 Traditional Chinese Medicine Syndrome Classification as a Measure of Diabetic Nephropathy Severity

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**Aims:** The prevalence of type 2 diabetes (T2D) and diabetic nephropathy (DN) is rapidly rising in Singapore. Traditional Chinese Medicine (TCM) is frequently used by Singaporeans with diabetic nephropathy (DN) but its accuracy in determining DN severity is unknown.

We aimed to evaluate the correlation between the TCM Syndrome Classification (TCMSC) of DN and the KDOQI chronic kidney disease (CKD) classification by glomerular filtration rate (GFR).

**Methodology:** This was a cross-sectional study of adults with T2D and DN (CKD stage II to V) in a tertiary public hospital. Anthropometrics, medical and laboratory data were collected. Quality of life (QOL) was assessed using RAND-36. Participants were evaluated by TCM physicians blinded to GFR values and assigned a TCMSC: nil, mild, moderate or severe.

**Result:** We correlated DN severity classified using TCMSC with GFR (calculated using the CKD-EPI equation) and QOL in 180 patients with DN, mean age  $64.0 \pm 8.0$  y, T2D duration  $16.4 \pm 8.0$  y, mean BMI  $28.3 \pm 4.7$  kg/m<sup>2</sup>, mean HbA1c  $8.2 \pm 1.8$ %, M/F: 112/68, Chinese/Malay/Indian/Others: 141/21/15/3. Patients with severe TCMSC DN had significantly lower GFR than those with TCMSC nil/mild CKD ( $42.1 \pm 18.9$  v  $31.1 \pm 19.3$  ml/min/1.73m<sup>2</sup>). However, TCMSC discriminatory value for severe CKD (Stage IV-V) was limited: sensitivity=39.4%, specificity=86.0%, positive predictive value=61.9% and negative predictive value=71.0%. However, TCMSC was a better predictor of QOL compared to GFR. Significantly lower SF36 scores reflecting poorer QOL were noted across all domains in more severe TCMSC categories, but only in the physical functioning domain for patients with lower GFR.

**Conclusion:** TCMSC was only moderately discriminatory for the severity of CKD as measured by GFR. However, TCMSC was predictive of QOL in T2D patients with DN. A strategy combining Western and TCM assessment would enable more holistic DN management.