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Prevalence of microalbuminuria and associated socio demographic and disease- related risk factors among type 2 diabetic mellitus patients attending the Diabetic Centre, Teaching Hospital Jaffna.

Senthuran S[1], Subunca R[1], Kumaran S[2], Aravinthan M[3] and Coonghe PAD[2]

[1] *Faculty of Medicine, University of Jaffna*

[2] *Department of Community and Family Medicine, Faculty of Medicine, University of Jaffna*

[3] *Diabetic Center, Teaching Hospital Jaffna*

Background: Diabetes Mellitus (DM) is an emerging threat to public health. DM affects quality of life and leads to premature death. Microalbumiuria (MA) being an early predictor of vascular complication is an ideal marker to identify DM complications. This study aimed to determine the prevalence and risk factors of MA in type 2 DM.

Methods: A descriptive cross-sectional study was conducted on a systematic random sample of 408 type 2 DM patients from November 2017 to January 2018 at the Diabetic Centre, Teaching Hospital Jaffna. An interviewer-administrated questionnaire was used to collectsocio-demographic details and clinical characteristics of the participants. Albumin creatinine ratio (ACR) measured by immunoturbidimetric assay method on a random spot sample of urine was extracted from laboratory reports. Data were entered and analyzed using Statistical Package for the Social Science (SPSS) version 21. P value was considered as significant at ≤ 0.05.

Results and Discussion: The study comprised 137 males and 271 females with a mean age of the 59.8 years (SD ±10.6). The prevalence of MA and overt nephropathy were 26.5% (n≤108, 95%CI 22.2%-30.8%) and 11.5% (n≤47, 95%CI 8.4%-14.6%), respectively. Among the study population, 46.6% had DM for less than 5 years. Based on BMI, many patients were over-weight (39.2%) and 26.7% were obese. The mean waist circumferencewas 93.36±9.5cm. None of the females smokedand 14.6% of males smoked. Age ($p \leq 0.031$), triglycerides level ($p \leq 0.012$) and duration of DM ($p < 0.0001$) were significantly associated positively with ACR. Waist circumference ($p \leq 0.047$) had a significant association with the presence of MA. Gender, level of education, body mass indexand the habit of smoking had no significant association.

Conclusion: The overall prevalence of MA in type 2 DM patients attending DC, THJ is 26.5%.

Keywords: Microalbuminuria, Diabetic, riskfactors, Jaffna