



**AC070**

**Adult Cardiology & Clinical Cardiovascular Medicine** • Poster Presentation

## **ORTHOSTATIC BLOOD PRESSURE CHANGES AND FACTORS ASSOCIATED WITH ORTHOSTATIC HYPOTENSION AND HYPERTENSION IN ADULTS WITH DIABETES IN CAMEROON. A CROSS-SECTIONAL STUDY**

**Clovis Nkoke, Ryan Awa, Teuwafeu Denis, Leslie Tasha Mbapah, Simeon Pierre Choukem**

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**Background:** Orthostatic blood pressure abnormalities are common in people with diabetes mellitus (DM) and are associated with adverse cardiovascular outcomes. Data on orthostatic hypotension (OH), exaggerated orthostatic pressor response (EOPR), and hypertension (OHTN) in patients with diabetes from sub-Saharan Africa are limited.

**Methods:** We conducted a multicenter cross-sectional study among 339 ambulatory adults with DM attending three referral hospitals in Cameroon between November 2023 and April 2024. OH, EOPR, and OHTN were defined according to the 2023 American Autonomic Society/Japanese Society of Hypertension consensus statement.

**Results:** The mean age was  $60.3 \pm 11.3$  years, and 66.1% of participants were female. The prevalence of OH was 13.3% (95% CI, 9.8–17.4), EOPR 8.9% (95% CI, 6.1–12.4), and OHTN 8.6% (95% CI, 5.8–12.1). Diabetes-related complications (peripheral neuropathy and/or diabetic retinopathy) (adjusted odds ratio [aOR] 2.47, 95% CI 1.05–5.81;  $P=0.038$ ) and ever smoking (aOR 2.85, 95% CI 1.09–7.44;  $P=0.032$ ) were independently associated with OH. Increasing age (aOR 1.08 per year, 95% CI 1.03–1.13;  $P=0.002$ ) and dyslipidemia (aOR 2.79, 95% CI 1.11–7.06;  $P=0.030$ ) were independently associated with OHTN. Sensitivity analyses using the previous diagnostic criteria increased the estimated prevalence of EOPR to 16.5% and OHTN to 15.0. **Conclusions:** Orthostatic blood pressure abnormalities are common among adults with DM in Cameroon. Routine orthostatic blood pressure assessment may enhance cardiovascular risk stratification

**Keywords:** Diabetes mellitus, orthostatic hypotension, orthostatic hypertension, exaggerated orthostatic pressor response, cardiovascular autonomic dysfunction, Cameroon.