

## **CAN and its Risk Factors for Type2 DM**

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### **ABSTRACT**

Diabetic Neuropathy (DN) is a heterogeneous disorder that encompasses a wide range of abnormalities affecting both proximal and distal peripheral sensory and motor nerves as well as the autonomic nervous system. DN is among the least recognized and understood complications of diabetes despite its significant negative impact on survival and quality of life. To determine the association of various risk factors with Cardiovascular Autonomic Neuropathy (CAN) among Type 2 Diabetes Mellitus individuals, a hospital based cross-sectional study was carried out at SRG Hospital associated with Jhalawar Medical College, Jhalawar Rajasthan, during May 2015 to November 2016. The participants were subjected to five non-invasive autonomic function tests as recommended by Ewing's criteria and categorized. There was increase in the prevalence of CAN with increase in the age ( $p < 0.001$ ). This association of different age groups with prevalence of CAN was found to be statistically significant. Gender, smoking, alcohol consumption, family history of diabetes, central and truncal obesity did not shown any significant relation with the prevalence of CAN. Participants consuming mixed diet (65.9% Vs 52.5%) had higher prevalence than vegetarians, which was statistically significant ( $p = 0.007$ ). There was significant association between duration of diabetes and CAN ( $p < 0.001$ ) showing progressive increased in CAN with increase in duration of diabetes. The prevalence of CAN in relation with duration of diabetes showed a rising trend. Present study showed a relatively high prevalence of CAN in the study area. In addition, it was also observed that advanced age and duration of diabetes were significantly associated with prevalence of CAN. There is a need to institute screening and awareness programs for early detection, even in rural areas, so as to prevent the development of the long term complications.