## **Original Research Paper**



# **General Medicine**

# CARDIAC AUTONOMIC NEUROPATHY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS AT HIGH RISK FOR ARRYTHIMIAS

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## **KEYWORDS:**

#### INTRODUCTION

Diabetic autonomic neuropathies are a heterogenous group of complications occurring due to wide spread damage of autonomic nerves as a result of sustained hyperglycemia resulting in metabolic derangement. Cardiac autonomic neuropathy (CAN) is described as impairment of autonomic nerve fibers that innervate the heart and blood vessels resulting in abnormalities of heart rate control and vascular damage. Presence of CAN increases the risk for severe hypoglycemia, silent myocardial ischemia, stroke, perioperative morbidity and mortality even in minor surgical procedures. Screening for CAN in asymptomatic type2 diabetic patients at diagnosis. Patient at higher risk for CAN are those with poor glycemic control, presence of micro and macro vascular complications. Life time risk for developing cardiac arrythimias in diabetic patient is estimated to be 16-50%.

#### Aim:

To study the prevalence of cardiac autonomic neuropathy in type 2 diabetes mellitus at a high risk for cardiac arrythmias.

#### DISCUSSION:

Among 40 patients males were 26(65%) and females were 14(35%) with male to female ratio of 1.85:1, majority of the patients had resting tachycardia and orthostatic hypotension. Association of CAN with major cardiovascular events such as CVA, silent MI, heart failure, angina, ventricular tachyacardia, ventricular fibrillations and sudden cardiac death. 17 patients (42.5%) found to had cardiac arrythmias,

#### **CONCLUSION:**

This study found that most of the patients had cardiac arrythimias (42.5%)in the form of ventricular tachyacrtdaia and ventricular fibrillations. The presence of cardiovascular disease at baseline was strong predictor for CAN.

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