Stress as Risk Factor for Onset of Type-2 Diabetes Mellitus in Visakhapatnam Tribal Community of Andhra Pradesh, India

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Abstract : Background: The prevalence of Type 2 Diabetes Mellitus is increasing drastically at a vigorous rate all over the world population. Aim: The present study aims to determine the prevalence of type-2 diabetes mellitus in Paderu tribal area population of Visakhapatnam district, located in northeastern region of Andhra Pradesh. Methods: A random sampling method was followed in 1025 subjects including controls (n=25) and determined 75-g oral glucose tolerance test to assess the presence of type 2 diabetes mellitus. The effect of anthropometric factors like age, gender, literacy, socio economic status, and environmental risk factors such as body fat response, hypertension and psychophysical stress response were determined in the studied subjects. Results: 78 (7.8%) were diabetic. Type 2 Diabetes Mellitus was found to be comparable between the two genders. Prevalence of diabetes was observed to be high in illiterate, low economic status subjects. Body fat response was comparable between control and diabetic subjects. However hypertension, stress associated enzymes showed significant (p < 0.05) decrease in diabetic subjects compared to controls in both the genders. Conclusion: It appears that there is a rising pattern in the prevalence of diabetes mellitus in tribal area, Paderu, Andhra Pradesh, India compared to previous rural studies.
Keywords : anthropometric studies, hypertension, oral glucose tolerance test, stress enzymes, type-2 diabetes mellitus
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