

A Study on Prevalence of Ischemic Heart Diseases among Hypertensive Patients Participating at a Hypertension Clinic, Teaching Hospital, Peradeniya

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Ischemic heart disease (IHD) is a leading cause of mortality in Sri Lanka. Potential risk factors remain unclear. Among the modifiable risk factors, hypertension is a critical offender. This study is aimed at assessing the risks for IHD among hypertensive patients. A descriptive cross-sectional study was carried out over 6 months, on 150 patients from the hypertension clinic of Teaching Hospital, Peradeniya. An interviewer administered questionnaire along with *Rose Angina Questionnaire (RAQ)* were used to collect data on potential risk factors of IHDs while *12-lead ECG* recordings were analyzed for *ST segment* alterations that mimic myocardial ischemic changes. Majority of participants were female (n= 93, 62%). The mean age of the sample was 61.5 ± 10.33 years and the average systolic, diastolic and mean arterial pressures were 146 ± 23.27 Hgmm, 85 ± 12.08 Hgmm and 104 ± 14.31 Hgmm respectively. The association between the *ST segment* deviations that mimic IHDs and presence of stage I or II hypertension (n=52, 42%) was statistically significant ($p < 0.05$, $df = 1$). Both the responses to *RAQ* and *ST segment* analysis were positive among 34 (23%) with Odds Ratio of 1.35 (95% CI, 0.707 – 2.578), representing the high risk group for IHDs. Positive family history of IHDs (n=28, 19%) brings 1.838 (95% CI, 0.742 – 4.551) fold risk as evidenced by positive *RAQ* and *ST segment* deviations. The hypertensive individuals with *diabetes* (n=7, 7%) exhibited a 2.444 risk (95% CI, 0.648 – 9.224) while having both *diabetes* and *hypercholesterolemia* (n=18, 18%) indicated a 2.424 fold risk of developing IHDs, than those without such Non Communicable Diseases (NCDs). The conventional risk factors such as positive family history and the presence of concurrent NCDs were emphasized as risks for IHDs among hypertensive patients.

Key words: Ischemic Heart Diseases, Rose Angina Questionnaire, 12 lead ECG, Hypertension, ST segment analysis

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