

## **Documents**

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Ischemic cardiomyopathy (ICM) versus non-ischemic cardiomyopathy (NICM): Findings from a single-centred observational study at Hospital Serdang, Malaysia

(2020) Journal of Cardiovascular Disease Research, 11 (4), pp. 179-185.

DOI: 10.31838/jcdr.2020.11.04.31

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## **Abstract**

Introduction: Cardiomyopathy is a serious health concern associated with heart failure (HF) and sudden cardiac death (SCD). Clinically, HF patients are categorized under ischemic and non-ischemic origin based on myocardial infarction, coronary artery disease, or evident angiographic presentation. Objective: To determine the existence of cardiomyopathy cases and assess factors associated to ischemic versus non-ischemic outcome among Malaysian population. Methodology: This retrospective, cross-sectional study involved a total of 170 patients from cardiology unit at Hospital Serdang in Selangor, Malaysia. All cardiomyopathy patients' data including clinical notes and lab investigations from 2006 till 2018 were reviewed and analyzed for interpretation of results. Results: The mean age of our study population was 54.8±14.8 (range 18-92 years), with males (68.8%) and females (31.2%), while ethnic distribution focused on Malay (59.4%), Chinese (25.9%) and Indian (12.9%). Ischemic cases were slightly higher (n = 96, 56.5%) and most frequently occurring type was dilated cardiomyopathy (88.8%). Majority of the patients had reduced LVEF (n =140, 82.4%); and a chi-square test revealed significant association with ischemic group (p <0.016). Men having ICM were more (n = 69) in comparison to NICM (n=48) while women developed cardiomyopathy at a greater age. Smokers among NICM was slightly more (51.9%) than ICM (48.1%). An independent t-test showed that mean age (58.3±13.3) was significantly higher (95% CI; p < 0.0001) among ICM patients. Diabetes and LDL were also significantly greater among ischemic group (65.5%, p <0.015) and (85.2%, p <0.001), respectively. There was no significant association between gender or ethnicity in relation to ICM or NICM. Conclusion: Ischemic heart disease prevails as a leading cause of death in Malaysia. Therefore, our study highlighted some of the factors significantly associated with higher risk of developing ischemic cardiomyopathy and established better awareness. © 2020 EManuscript Technologies. All rights reserved.

## **Author Keywords**

Cardiomyopathy; Heart Muscle Diseases; Ischemic; Malaysia; Non-ischemic

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Publisher: EManuscript Technologies

ISSN: 09753583

Language of Original Document: English Abbreviated Source Title: J. Cardiovasc. Dis. Res.

2-s2.0-85098992862 **Document Type:** Article **Publication Stage:** Final

Source: Scopus





