

Trend of increase in the incidence of acute myocardial infarction in a Japanese population : Takashima AMI registry, 1990-2001

著者	Rumana Nahid
発行年	2009-03-25
その他の言語のタイトル	日本人の急性心筋梗塞発症は増加しているか？ : 高島循環器発症登録事業1990-2001年より ニホンジン ノ キュウセイ シンキン コウソク ハ ッショウ ハ ゾウカシテイルカ : タカシマ ジュ ンカンキ ハッショウ トウロク ジギョウ 1990 2001ネン ヨリ
URL	<a href="http://hdl.handle.net/10422/277">http://hdl.handle.net/10422/277</a>

氏 名	Nahid Rumana
学位の種類	博士 (医学)
学位記番号	博士 第582号
学位授与の要件	学位規則第4条第1項該当
学位授与年月日	平成21年 3月25日
学位論文題目	Trend of Increase in the Incidence of Acute Myocardial Infarction in a Japanese Population: Takashima AMI Registry, 1990-2001.  (日本人の急性心筋梗塞発症は増加しているか?: 高島循環器発症登録 事業 1990~2001年より)
審査委員	主査 教授 浅井 徹  副査 教授 野坂 修一  副査 教授 松浦 博

## 論文内容要旨

※整理番号	587	(ふりがな) 氏名	ナヒド ルマーナ Nahid Rumana
学位論文題目	Trend of Increase in the Incidence of Acute Myocardial Infarction in a Japanese Population: Takashima AMI Registry, 1990-2001. 日本人の急性心筋梗塞発症は増加しているか？：高島循環器発症登録事業 1990~2001 年より		
<p>The incidence and mortality of acute myocardial infarction (AMI) remain low in Japan despite major dietary changes and worsening cardiovascular risk factors situation that should have resulted substantial increase in AMI rates (Japanese paradox). We examined the current trend in the incidence of AMI during the period of 1990-2001 using data from the Takashima AMI Registry covering a stable population of approximately 55,000 in central Japan. We calculated AMI incidence rates (per 100,000 person-year) and 95% confidence intervals (95%CI) for 1990-1992, 1993-1995, 1996-1998, and 1999-2001. The incidence trend was determined by calculating the average annual change in percentage across the years. There were 352 (men: 224 and women: 128) registered first-ever AMI cases during 1990-2001. Age adjusted incidence rate of all AMI showed gradual increase from 1990-1992 (39.9; 95%CI: 29.8, 50.0) to 1999-2001 (62.6; 95%CI: 51.5, 73.7). In men, the age adjusted incidence rate increased from 66.5 (95%CI: 46.4, 86.6) in 1990-1992 to 100.7 (95%CI: 78.6, 122.7) in 1999-2001. In women, fluctuation was observed after an initial steep increase. The average annual incidence increased by 7.6% (95%CI: 3.5, 11.7) among men and by 8.3% (95%CI: 1.0, 15.6) among women. To the best of our knowledge, this is the first study to report an increasing trend of AMI in a Japanese population.</p>			

- (備考) 1. 論文内容要旨は、研究の目的・方法・結果・考察・結論の順に記載し、2千字程度でタイプ等で印字すること。  
2. ※印の欄には記入しないこと。

## 自己担当部分についての報告書

申請者 Nahid Rumana

着想 : The incidence and mortality of acute myocardial infarction (AMI) remain low in Japan despite major dietary changes and worsening cardiovascular risk factors a situation that should have resulted in a substantial increase in AMI rates (Japanese paradox). Our department has a disease registration system going on for AMI, which covers an entire community population. In the starting of my graduate studies, Professor Hirotsugu Ueshima advised me on exploring the current trend in the incidence of AMI from the registration research.

方法論 : To explore the trend in the incidence of AMI in a population, we have used data from the Takashima AMI Registry. This AMI registry, covering an entire community population for a long duration would be most appropriate to monitor and track the incidence of a disease like AMI over time. Very few cardiovascular disease registries covering an entire community exist in Japan to define trends in the incidence of AMI over a prolonged time period. In accordance with the WHO-Monitoring Trends and Determinants in Cardiovascular Disease (WHO-MONICA), we have monitored the incidence of AMI in Takashima County, Shiga prefecture in Japan for a number of years, compiling information from disease registration covering the entire population of the county. The purpose of this study was to explore the AMI incidence trend using a population-based disease registry that provides the most current status in the Japanese population.

研究の施行 : The analyses of the results were carried out by the applicant, Nahid Rumana. We calculated AMI incidence rates (per 100,000 person-year) and 95% confidence intervals (95%CI) for 1990-1992, 1993-1995, 1996-1998, and 1999-2001. The incidence trend was determined by calculating the average annual change in percentage across the years.

論文の作成 : This study was directly supervised Dr. Yoshikuni Kita and Professor Hirotsugu Ueshima. They have substantial contributions to the intellectual content of the paper in the aspect of conception and design, acquisition of data, critical revision of the manuscript for important intellectual content, obtaining funding, administrative, technical, and material support. Dr. Akira Okayama, Dr. Yasuyuki Nakamura, Dr. Hideki Sugihara, Dr. Yutaka Morita, and Dr. Nobuyoshi Tomioka have been contributing to the continuation of the registry activities. Tanvir Chowdhury Turin made substantial contributions in literature review, study interpretation, drafting of the manuscript and critical revision of the content. Dr. Yoshitaka Murakami and Dr. Robert D Abbott made substantial contributions to the intellectual content of the paper in the aspect of statistical expertise and critical revision of the manuscript.

## 学位論文審査の結果の要旨

整理番号	587	氏名	Nahid Rumana
論文審査委員			
(学位論文審査の結果の要旨)			
<p>食事内容の変化や心血管病リスク因子の増悪、これらは急性心筋梗塞の発生頻度を増加させる結果につながりえるのだが、日本はこのような状況があるにもかかわらず、急性心筋梗塞の発生率、急性心筋梗塞による死亡率は依然として低いままである。この仮説に基づき、中部日本の約 55,000 人を含んだ高島急性心筋梗塞レジストリーのデータを用い、1990 年～2001 年の期間における急性心筋梗塞の発生率の動向について分析した。1990 年～1992 年、1993 年～1995 年、1996 年～1998 年、1999 年～2001 年の各期間における 100,000 人年あたりの急性心筋梗塞発生率と 95%信頼区間を計算した。</p> <p>この研究の主要所見は、1990 年～2001 年の 12 年間で急性心筋梗塞の発生率は増加傾向にある、というものであった。急性心筋梗塞の発生率は平均で、1 年毎に男性で 7.6%、女性で 8.3% 有意に増加した。</p> <p>本研究は、公衆衛生と臨床実施の両面 心臓血管病疫学の分野において、非常に重要な論文であり、博士 (医学) の学位を授与するに値するものである。</p> <p>なお、本学位授与申請者は平成 21 年 2 月 4 日実施の論文内容とそれに関する試問を受け、合格と認められたものである。</p>			
(平成 21 年 2 月 19 日)			