**CORONARY ATHEROSCLEROSIS IN NON-CARDIAC SUDDEN UNEXPECTED DEATHS: AN AUTOPSY STUDY OF ASIAN POPULATION**

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*Objectives:* To evaluate the frequency of atherosclerosis in non-cardiac-caused sudden unexpected death (SUD) in Asian population.

*Background*: Atherosclerosis is the most common cause of cardiac-caused SUD worldwide. The frequency of arthrosclerosis in normal population was reported as 4.5%. However, the frequency of arthrosclerosis in non-cardiac-caused SUD of Asian population is unclear.

*Methods*: The autopsy reports of out-of-hospital SUD from January 2013 to June 2014, performed at Department of Pathology, Faculty of Medicine, Ramathibodi Hospital, Bangkok, Thailand, were reviewed. The frequency of arthrosclerosis in non-cardiac-caused SUD was evaluated. Basic characteristics and frequency of coronary artery arthrosclerosis were also compared between cardiac-caused group and non-cardiac-caused group.

*Results*: A total of 371 autopsied SUD were reviewed. Among them, 125 cases died due to non-cardiac causes. Frequency of male was not different between cardiac-caused group and non-cardiac-caused group (79.3% VS 75.2%, respectively), as well as average age (52.3 years VS 50.4 years, respectively). Left anterior descending artery was the most commonly involved in both cardiac-caused and non-cardiac-caused (90.0% and 54.8%, respectively). Frequency of arthrosclerosis was found more in cardiac-caused group compared to non-cardiac-caused group (52.8% VS 20.0%, respectively, p<0.01), as well as triple vessel disease (15.9% VS 2.4%, respectively, p<0.01).

*Conclusions*: The frequency of atherosclerosis in non-cardiac-caused SUD in Thai population was very high up to 20.0%. Atherosclerosis is an important risk factor of SUD in both cardiac-caused SUD and non-cardiac-caused SUD.