

Most sudden deaths are not sudden

*Early detection of coronary heart diseases is the best preventive measure*

Although sudden deaths occur unexpectedly, most sudden deaths are associated with cardiovascular diseases and can be prevented if early detection is done.

The Institute of Cardiovascular Science and Medicine, Faculty of Medicine, the University of Hong Kong, studied the 1,204 sudden deaths reported in 1997. Its annual incidence in Hong Kong was about 18 per 100,000 population, compared with 125 per 100,000 in USA. The lower prevalence of coronary artery disease in Hong Kong may account for the difference.

Cardiovascular diseases caused 89% of the 1,204 sudden deaths. About 60% of all cases were associated with coronary artery diseases. Acute coronary occlusion leads to acute myocardial infarction. When the coronary artery is blocked, oxygen and nutrients cannot be delivered to the myocardium via coronary circulation, causing irreversible myocardial cell damage and cell death. In such circumstances, if the blood flow cannot be restored in time, the heart muscle will die.

For patients identified of being at high-risk of arrhythmic deaths, implantable cardioverter defibrillator is a cost-effective treatment. Factors associated with cardiovascular diseases are genetics, obesity, hypertension, smoking, high cholesterol level and aggressive personality.

With early detection and effective treatment for cardiovascular diseases, most sudden deaths are preventable.