

# SUDDEN DEATH

## DEFINITION AND THE PROBLEM OF INTERVENTION

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Sudden cardiac death is an important end-point in most epidemiological and intervention studies. Agreement on its definition is crucial for comparison of these studies and for standardization of data. The I.S.C. Scientific Council on Arteriosclerosis and Ischaemic Heart Disease has proposed that sudden unexpected natural death should be defined "as death occurring instantaneously or within an estimated 24 hours of the onset of acute symptoms or signs and that the details of death should be recorded on a form which provides for information concerning the time of death and the source from which this information was derived. Another definition commonly used is "death within one hour of the onset of symptoms or of last being seen alive". The relevance of these and other definitions will be considered.

Prevention of sudden cardiac death is not possible if it is unexpected, and its success depends on the re-

liable identification of those particularly at risk for this fatal complication of ischaemic heart disease (IHD). A recent study<sup>1</sup> has shown that the majority of sudden cardiac deaths are not preceded by recognisable symptoms of IHD. And there are very few identifiable characteristics which can be related more to a sudden fatal outcome than to a non-fatal myocardial infarct or angina although these may include heart rate, heart volume, arrhythmias and conduction disturbances.

Prophylaxis with drug depends on the certainty with which the risk has been identified and the safety of the drugs. Prophylaxis by providing the incipiently ischaemic myocardium with a protective balance of substrates—more glucose and less fatty acids—needs consideration<sup>2</sup>.

### REFERENCES

1. Fulton, P. M., Duncan, B., Lutz, W., Morrison, S. L., Donald, K. W. Kerr, F., Kirby, B. J., Julian, D. G. and Oliver, M. F.: *Lancet*, 1, 860, 1972.
2. Oliver, M.F. *Circulation*, 45, 491, 1972.

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