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Title:

Sudden cardiac death in the young in Denmark – from research and national initiatives to guidelines

Abstract:

Introduction Cases of sudden unexpected death (SUD) occur in all age groups. The cause of death in case below 50 years is often cardiac and termed Sudden Cardiac (SCD) death. In order to lower the burden of SCD several initiatives have been implemented in Denmark.

Material and methods Since 2000 cases of SCD under 50 years have been systematically adjudicated and collected nationwide. Using this unique database we have established incidence, cause of death and SCD and nonSCD in the young. By utilizing the national health registries we have identified high risk population in the young.

Results: In SUD case under 35 years 70% are autopsied in Denmark. Cause of death at autopsy in SCD cases under 35 years is most often normal heart. Using the nationwide registries, we have found that the family left behind is at higher risk compared to general population. 70% of all SCD cases are potentially inherited. A multidisciplinary collaboration was undertaken to increase the number of autopsies in the young.

Discussion: Autopsy is pivotal in SUD cases. Expert cardiac pathology is preferred in SCD cases. A setup where the family left behind is offered clinical evaluation and consented molecular autopsy was established. Multidisciplinary collaboration resulted in a legislative change enabling the performance of autopsies at forensic institutes in SUD cases with suspected inherited cause. The recommendation on autopsy in all SUD with a suspected inherited cause have been endorsed by national and international guidelines.

This abstract should be assessed together with the abstract from Professor Jytte Banner