Exertion Not Implicated in Young Patients' SCD

BY BRUCE JANCIN

ORLANDO — Sudden cardiac death accounted for 8% of all mortality in individuals aged up to 35 years in Denmark, in a first-of-its-kind comprehensive national study.

The extensive Danish national health record system permitted systematic investigation of all 6,629 Danish deaths in subjects aged 35 years and younger during 2000-2006, with review of all death certificates and the autopsy reports in most presumed cases, Dr. Bo G. Winkel explained at the annual scientific sessions of the American Heart Association.

About a third (31%) of SCDs happened during sleep, 58% while individuals were awake and relaxed, and 10% occurred during moderate- to high-intensity physical activities, reported Dr. Winkel of the University of Copenhagen.

The mean age at the time of SCD was 26 years, with a median of 29 years.

Autopsies were conducted in 454 of the 619 patients with presumed SCDs. The autopsies revealed definite evidence of SCD in 224 cases and negative findings strongly suggestive of sudden arrhythmic death syndrome in another 136. This syndrome includes diseases such as long QT syndrome, catecholaminergic polymorphic ventricular tachycardia, and Brugada syndrome. Autopsies showed pulmonary embolism to be the cause of death in 49 cases, ischemic heart disease in 39, myocarditis and aortic dissection in 23 each, and hypertrophic cardiomyopathy in 18, Dr. Winkel said.

Dr. Winkel estimated the annual incidence of SCD in the 0-35 age group to be a maximum of 3.1 cases per 100,000 population. His study was funded by the Danish Heart Foundation. ■