## **Sudden Death in Young Patients: A Study of 312 Autopsy Cases**

Authors: N. Haj Salem, M. Belhadj, S. Ben Jomâa, S. Saadi, R. Dhouieb, A. Chadly

Abstract: Introduction: Sudden death in young is seen as a dramatic phenomenon requiring knowledge of its impact and determining their causes. Aim: We aim to study the epidemiological characteristics of sudden death in young, and to discuss the mechanism and the importance of autopsy in these situations. Material and methods: We performed a retrospective cohort study using autopsy data from the department of forensic medicine at the University Hospital of Fattouma Bourguiba, Monastir-Tunisia. A review of all autopsies performed during 23 years was done. In each case, clinical information and circumstances of death were obtained. We have included all sudden death in persons aged between 1 year and 35 years for the male and from one year to 45 years for female. We collected 312 cases of sudden death during the studied period. The collected data were processed using SPSS 20. The significance level was set at 0.05. Results: Thirty-two cases of cardiac ischemic sudden death have been collected. Myocardial infarction was the second cause of sudden death in young patients. There was a male predominance. The most affected subjects were aged between 25-45 years. The death occurred more frequently at rest. Coronary artery disease has been discovered in twenty-four cases (75%). A severe coronary artery disease was observed in two children with medical history of familial hypercholesterolemia. The myocardial infarction occurred in healthy coronary arteries in eight cases. An anomalous course of coronary arteries, in particular, myocardial bridging, was found in eight cases (25%). Toxicological screening was negative in all cases. Second cause of death was hypertrophic cardiomyopathy. Neurological and respiratory causes of death were implicated respectively in 10% and 15%. Conclusion: Identifying epidemiological characteristics of sudden death in this population is important for guiding approaches to prevention that must be based on dietary hygienic measures and the control of cardiovascular risk factors.

Keywords: autopsy, cardiac death, sudden death, young

Conference Title: ICFMT 2018: International Conference on Forensic Medicine and Toxicology

Conference Location: Prague, Czechia Conference Dates: March 22-23, 2018