

Ziankevich A. V., Koltun K. G.

**REVIEW OF DENTAL COMPUTER-AIDED DESIGN
AND COMPUTER-AIDED MANUFACTURING**

Scientific supervisor senior teacher Kostiouchkina O. M.

Department of Foreign Languages

Belarusian State Medical University, Minsk

The importance of this topic is determined by a high incidence of sudden cardiac deaths (SCD). Cases of sudden death make up about 70% of the number of all deaths from coronary heart disease. The second issue of this problem is the fact that the majority of patients who suddenly died did not have any severe, incompatible with life organic changes of the heart. A considerable part of patients with sudden heart failure can be successfully resuscitated if immediate medical help is rendered. The investigation of sudden cardiac death preventive measures is considered to be very perspective.

Research objective: the identification of the reasons and mechanisms of sudden cardiac death development, determination of risk groups, development of sudden death preventive measures and improvement of first medical aid in case of sudden arrest of blood circulation.

Research technique: A review of all the cases of nontraumatic sudden cardiac deaths in people 30-50 years of age during 2007, 2012, 2013 years has been carried out. A group of people who suddenly died of precisely heart failure has been determined, the data on the place, time, circumstances of death, constitutional features of victims, the condition of cardiovascular system and other accompanying pathologies have been systematized.

Research materials: medical examination protocols of people who died of a sudden blood circulation arrest aged from 30 to 50 years during 2007, 2012, 2013 years. The research was conducted at the Department of General Examination #3 of State Service of Forensic Medical Examination.

Results: According to the data obtained the nosological forms that can result in sudden cardiac death are: coronary heart disease (69%), hypertrophic cardiomyopathy (11%), dilated cardiomyopathy (20%). The factors, allowing us to determine groups of people with a high risk of sudden death (male gender, excess body weight, hypertrophy of the left ventricle resulting from arterial hypertension, alcohol intoxication) have been revealed. In 98% of cases resuscitation measures were not carried out due to biological death before the ambulance arrival. In this respect special attention should be paid to sudden cardiac death preventive measures (complex study of criteria for drawing up SCD risk stratification, the reduction of coronary heart disease development risk, cardioverter-defibrillator implantation).