

myocardial infarction, stroke, progression of angina and repeat revascularization, also was higher in 1<sup>st</sup> group vs. 2<sup>nd</sup> group - 62.5% (20) vs. 38.1% (24),  $p < 0.05$ . Administration of low dose statins did not influence at 6 months post-PCI the need for repeat coronary angiography (18.6% (6) patients in 1<sup>st</sup> group vs. 15.9% (10) in 2<sup>nd</sup> group,  $p > 0.05$ ), repeat revascularization (15.6% (5) vs. 15.6% (10),  $p > 0.05$ ) and target lesion revascularization (12.5% (4) vs. 7.9% (5),  $p > 0.05$ ). Clinical in-stent restenosis was determined in 12.5% (4) patients in the no-statin group and 7.9% (5) patients in the statin group ( $p > 0.05$ ). In addition, there were no differences in total cholesterol (CT), HDL-cholesterol (HDL-C) and LDL-cholesterol (LDL-C) levels between these two groups, irrespective of statins treatment: 1<sup>st</sup> group – CT –  $5.3 \pm 0.21$  mmol/l, HDL-C –  $1.22 \pm 0.03$  mmol/l, LDL-C –  $2.96 \pm 0.16$  mmol/l and 2<sup>nd</sup> group – CT –  $5.44 \pm 0.16$  mmol/l, HDL-C –  $1.26 \pm 0.02$  mmol/l, LDL-C –  $3.19 \pm 0.14$  mmol/l ( $p > 0.05$ ).

**Conclusion:** This study suggests that low dose statins have a favorable effect on clinical outcome in patients after percutaneous coronary interventions. Therefore statin therapy should be administered to all patients undergoing coronary interventional procedures.

**Key words:** Statins, percutaneous coronary intervention, dyslipidemia, major cardiovascular events

#### 44. UTILIZING PARAMEDICS IN PRE HOSPITAL AND PATIENT CARE

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**Introduction:** The EMS system is a very known modality that rapidly evolved from 2<sup>nd</sup> half of 20<sup>th</sup> century, the rapid development was due to changes in drift of population to urbanized areas, usage of more motor vehicles and rapid growth in population. Nowadays exist two approaches toward administration of EMS one is by physicians while another is given by paramedics. To clarify paramedics are best defined as medical professionals who provide medical care at an advanced life support level in the pre-hospital environment, usually in an acute phase of illness or injury.

**Purpose and Objectives:** Highlighting the importance of transition of Emergency Medical Services in Moldova from physicians based system to paramedic based system in order to improve the quality of response to the emergency medical cases, decrease expenses in healthcare system in Moldova and to solve physician deficiency issue.

**Materials and Methods:** Our analysis of EMS systems worldwide has led us to an important conclusion that even though paramedics' education period and training courses are shorter (2-4 years) than that of physicians (approximately 12 years), their skills don't fall from that of physicians in pre hospital emergency care modality. As profession of paramedics developed and has become an university based training for theoretic knowledge and practical part on ambulances and medical simulation centers. Same EMS systems that provide pre hospital care by university educated paramedics exist in developed countries like, Ben-Gurion University of Negev in Israel, University of Washington Medical Center in USA, University of Greenwich in UK, and University of Tasmania in Australia. Systems that use physicians in providing pre hospital care are France, Germany, Russian Federation, and Republic of Moldova.

**Results:** In order to make a quality comparison of both professionals that work in those two different systems we analyzed 2 profound researches that evaluated their diagnostic and treatment skills. First research of American Heart Association (AHA) compared diagnostic abilities of paramedics and physicians in stroke patients and revealed that recognition of neurological deficits by ambulance paramedics using FAST shows good agreement with physician assessment. Second research of American journal of Emergency medicine showed that highly trained paramedics in an urban emergency medical services system can identify patients with STEMI as accurately as blinded physician reviewers.

**Conclusion:** In conclusion and in scope of current health problems and ongoing burden and load in financing and medical personnel quota deficiencies in many healthcare systems a transition to EMS system that is administered by paramedics can be very beneficial to healthcare system problems and

simultaneously keep provision of professional pre hospital medical treatment in underdeveloped countries. A transition to such system requires cooperation of many "players" and effort to bring this change in EMS provision, but in the long run it will bring a cure to ongoing problems in healthcare systems.

**Key words:** Paramedics, Physicians, EMS, Health care system

#### 45. CLINICAL CASE: DEXTROCARDIA – DISEASE OR A NORM VARIATION

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**Introduction:** Dextrocardia is a rare clinical entity, with the location of the heart, and apex orientation to the right, with an incidence of 0.2-1%, and associated with situs inversus in 1/3 of the patients. In the absence of other structural modifications it presents no cardiovascular risk, the risk of coronary artery disease (CAD) being similar to that of the general population. Dextrocardia was first described by Fabricius H. in 1606, but situs inversus – by Severinus M. in 1643. It often associates with other congenital malformations (CM) – single ventricle, ventricular septal defect, tricuspid atresia. Clinically, dextrocardia shows no manifestations, except when associated with severe CM. Its confirmation needs a standard ECG, with the electrodes placed on the right, and an EchoCG evaluation.

**Clinical case.** Patient B., 62 years, admitted in PMSI MCH „Holy Trinity”, Acute Myocardial Infarction (AMI) Department with the Diagnose: Ischaemic cardiopathy. Unstable Angina. Myocardial infarction (1991). NYHA II HF. Dextrocardia.

At onset it presents with constrictive retrosternal pain at little physical activity lasting 15 minutes, suppressed by 3 tablets of nitroglycerine and inspiratory dyspnea. From history, in 1991 the patient underwent an AMI. Regular treatment with  $\beta$ -blockers, diuretics, antiagregants. On physical examination: overall condition of medium severity; normal-colored skin; vesicular breath sounds; rhythmic heart sounds, HR-70 b/min, BP-130/80 mm/Hg; painless abdomen on palpation.

On standard ECG-microvoltage, heart electric axis(HEA)- right deviation, negative P wave, inverted T wave in DI and AVL, R wave decrease from V1 to V6. Right ECG: sinus rhythm, HR-60 b/min., normal HEA. Left ventricle(LV) hypertrophy. Antero-septal and apical LV post-infarction sequelae. EchoCG: Dextrocardia; ascending Aorta wall induration; moderate dilation of the LA, RA and LV; hypertrophy of the LV myocardium; adequate LV contractility (EF-57%); LV antero-septal hypokinesia and apical akinesia. Mild PHT. Abdominal USG: Situs inversus. Laboratory tests – no deviations. The patient received the following treatment: anticoagulants, antiplatelets, nitrates,  $\beta$ -blockers, statins, metabolic drugs.

**Conclusion:** Patient B., 62 years, with dextrocardia and myocardial infarction develops an unstable angina, with typical clinical signs. The patient is hospitalized, following treatment according to the clinical guidelines, with positive results. In the specialized literature, patients with dextrocardia, in the absence of CM, need no particular approach of CAD, which was also seen in the case above.

**Keywords:** Dextrocardia, situs inversus, coronary artery disease

#### 46. STROKE AND CARDIOVASCULAR RISK FACTORS

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**Introduction:** According to world-heart-federation in the world each year about 15 million people suffer a stroke, of which more than a third die and one third remain disabled for life. AVC worldwide represents the second leading cause of disability, being preceded by dementia.

World-heart-federation also provides data such as stroke, globally rarely is encountered in persons aged less than 40 years and is the fifth leading cause of death for people aged between 15-59 years, and two due to persons over the age of 60 years.