



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Results: A total of 279 STEMI events occurred in the study periods. Sex and age did not differ significantly between COVID and pre-COVID periods nor with SARS-CoV-2 infection. On the contrary, with regard to the location of the infarct, an interesting relationship was found with the viral infection. COVID-19 positive people have inferior STEMI much more frequently than negative people (p -value <0.0001 , chi-square test).

Conclusions: Literature describes possible links between SARS-CoV-2 infection and cardiovascular events and ACS represents a prevalent complication in COVID-19 patients. Our study reported an increase of STEMIs during 2020 compared to the pre-pandemic period. As always, men are more affected and at an earlier age than women. Regarding the higher frequency of the inferior location in positive people, according to other studies, the most probable pathogenetic hypothesis is an inflammatory etiology of ischemia, in which myocardial infarction cannot be classified as type 1, but type 2 (oxygen supply and demand imbalance).

P096

Increased Risk of Death after Out-of-Hospital Cardiac Arrest among Cancer Patients

Hanna Hägglund¹, Martin Jonsson², Elham Hedayati³, Christel Hedman⁴, Therese Djärv¹

¹Department of Medicine, Solna, Stockholm, Sweden;

²Department of Clinical Science and Education, Södersjukhuset, Stockholm, Sweden;

³Department of Oncology-Pathology, Stockholm, Sweden;

⁴Department of molecular medicine and surgery, Stockholm, Sweden

Purpose of the study: The population of cancer survivors is growing, with a following increased risk of cardiovascular death (1). The association between cancer and out-of-hospital cardiac arrest (OHCA) survival has not been thoroughly investigated. In this study, we used national, population-based registries to address this knowledge gap.

Material and methods: For this study, OHCA cases among adults (≥ 18 years) 2010–2017 were obtained from the Swedish Register of Cardiopulmonary Resuscitation, and linked to the National Patient Registry for identification of cancer diagnosed within 5 years prior to the arrest. Differences between cancer patients and controls (defined as OHCA-patients without cancer diagnosis ever) was assessed using multiple logistic regression adjusted for prognostic factors for short-term survival, and Kaplan-Meier analysis for long-term survival.

Results: A total of 30,163 OHCA patients were included, 2894 (10%) with pre-OHCA cancer diagnosis and 27,691 without (controls). Pre-OHCA cancer was associated with decreased short-term survival for cancer of all sites (adjusted odds ratio, OR 0.57, CI 0.49–0.66), locoregional cancer (OR 0.71, CI 0.6–0.84) and metastasized cancer (OR 0.26, CI 0.16–0.44) compared to controls. A decrease in short-term survival compared to controls was seen for lung cancer, gastrointestinal-, hematological-, and gynecological cancers. Among 30-day survivors, those with locoregional cancer as well as metastasized cancer, had poorer long-term survival compared to controls.

Conclusion: Pre-OHCA cancer was associated with decreased short- and long-term survival regardless of cancer spread compared to controls, although with markedly poorer prognosis for metastasized disease. Short-term survival varied by cancer form. These results suggest that cancer site and cancer spread are more relevant factors than cancer in general regarding its effect associated to survival.

Reference

Blaes AH, Shenoy C. Is it time to include cancer in cardiovascular risk prediction tools?. *Lancet*. 2019;394(10203):986–988.

P097

How much we know about Pediatric Advanced Life Support 2021 guidelines – national survey

Antigona Hasani¹, Albina Rashiti², Rita Demiri³

¹Department of Anesthesiology and Reanimation, Faculty of Medicine, University of Prishtina, Pristina/KOSOVO, Albania;

²Department of Faculty of Medicine, University of Prishtina, Pristina/KOSOVO, Albania;

³American Hospital Kosovo, Pristina/KOSOVO, Albania

Purpose of the study: The new cardiopulmonary resuscitation (CPR) guidelines are introduced during ERC Congress 2021. The aim of our study is to measure the level of knowledge of respondents about Pediatric Advanced Life Support (PALS) according to the 2021 guidelines.

Materials and methods: An anonymous questionnaire was distributed to the 330 subjects to assess their knowledge for PALS, 2021 guidelines. A survey was sent in January 2021 to pediatricians, anesthesiologists, pediatric surgeons, pediatric nurses and medical students.

Results: The response rate is 90.9% (300 persons). Fifty two per cent were male, and 48% were female. The average of the respondents was 45.04 ± 12.02 years. Only 32% of respondents had attended PALS courses. Thirty three per cent was informed from ERC or national society about the new 2021 guidelines. The other 35% had poor knowledge about new ERC guidelines. Pediatricians and anesthesiologist are more informed.

Conclusions: Deficiencies exist in the knowledge of new PALS guidelines among non-anesthesiologists and non-pediatricians. The national society, Kosovo Resuscitation Society (KRS) should be the part of ERC and accompanied training programs should be considered in ongoing continuing medical education.

References

Van de Voorde P, Turner NM, Djakow J, *et al*. European Resuscitation Council Guidelines 2021: Paediatric Life Support. *Resuscitation* 2021;161:327–87.

Greif R, Lockey A, Breckwoldt J, *et al*. European Resuscitation Council Guidelines 2021: Education for resuscitation. *Resuscitation* 2021;161:388–407. 12.

P098

Characteristics and outcomes of out-of-hospital cardiac arrest in home and public toilet rooms: An analysis using extended nationwide database

Takahisa Kamikura, Hideo Inaba, Takashi Iwasaki, Yutaka Takei

Niigata University of Health and Welfare, Niigata, Japan

Aims: To compare the characteristics and outcomes of out-of-hospital cardiac arrest (OHCA) between toilet (washroom) and other spaces at home and other (public) locations.

Methods: Of 504,561 OHCA cases recorded in the nationwide Utstein-style database during the period of 2016–2019, 465,046 were not witnessed by emergency medical service (EMS). Extended database for 424,796 cases was created by combining and reconciling the Utstein-style data with another EMS transportation database including detailed information on locations and in-hospital diagnosis. After excluding 4,652 cases without any prehospital resuscitation, 420,136 cases (304,078 in home and 116,058 in public toilet rooms) were analyzed by univariate and propensity score matching analysis.

Results: OHCA occurred in toilet rooms in 3.6% (15,194) of 4,652 cases analyzed but very rarely occurred in public toilet rooms (0.54%,