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ATS Annual Conference Issue

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Vol. 14, No. 5, May 2017

ANNALS OF THE AMERICAN THORACIC SOCIETY®

A journal dedicated to advancing care in respiratory diseases, sleep disorders, and critical illness



Cherry blossoms in bloom at the Graduate School of Medical Sciences and Medical School, Kawasumi, Mizuho-cho, Mizuho-ku Nagoya, Nagoya City University, Japan. Photograph by Yoshihiro Kanemitsu, M.D., Ph.D., and corresponding author of "Serum Periostin as a Biomarker for Comorbid Chronic Rhinosinusitis in Patients with Asthma" in this issue of *AnnalsATS*.

An official journal of the American Thoracic Society
Advancing Pulmonary, Critical Care and Sleep Medicine
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Class	Description	Example
I	**The patient was previously healthy and fit**	Healthy, non-smoking, no or minimal alcohol use
II	**The patient has mild systemic controlled disease**	Mild diseases only without substantive functional limitations. Examples include (but not limited to): current smoker, social alcohol drinker, pregnancy, obesity (30 < BMI < 40), well-controlled DM/HTN, mild lung disease
III	**The patient has severe but not incapacitating systemic disease**	Substantive functional limitations; one or more moderate to severe diseases. Examples include (but not limited to): poorly controlled DM or HTN, COPD, morbid obesity (BMI ≥40), active hepatitis, alcohol dependence or abuse, implanted pacemaker, moderate reduction of ejection fraction, ESRD undergoing regularly scheduled dialysis, history (>3 months) of MI, CVA, TIA, or CAD/stents
IV	**The patient has incapacitating systemic disease**	Examples include (but not limited to): recent (< 3 months) MI, CVA, TIA, or CAD/stents, ongoing cardiac ischemia or severe valve dysfunction, severe reduction of ejection fraction, sepsis, DIC, ARD or ESRD not undergoing regularly scheduled dialysis
V	**The patient is moribund not expected to survive 24 hours**	Examples include (but not limited to): ruptured abdominal/thoracic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction

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Evidence-Based Guidelines for Weaning and Discontinuing Ventilatory Support

A Collective Task Force Facilitated by the American College of Chest Physicians, the American Association for Respiratory Care, and the American College of Critical Care Medicine

Introduction
Pathophysiology of Ventilator Dependence
Criteria to Assess Ventilator Dependence
Managing the Patient Who Has Failed a Spontaneous Breathing Test
Role of Tracheotomy in Ventilator-Dependent Patients
The Role of Long-Term Facilities

[Respir Care 2002;47(1):69–90]

Introduction

The discontinuation or withdrawal process from mechanical ventilation is an important clinical issue.[1,2] Patients are generally intubated and placed on mechanical ventilators when their own ventilatory and/or gas exchange capabilities are outstripped by the demands placed on them from a variety of diseases. Mechanical ventilation also is required when the respiratory drive is incapable of initiating ventilatory activity, either because of disease processes or drugs. As the conditions that warranted placing the patient on the ventilator stabilize and begin to resolve, attention should be placed on removing the ventilator as quickly as possible. Although this process often is termed "ventilator weaning" (implying a gradual process), we prefer the more encompassing term "discontinuation."

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Unnecessary delays in this discontinuation process increase the complication rate from mechanical ventilation (eg, pneumonia, airway trauma) as well as the cost. Aggressiveness in removing the ventilator, however, must be balanced against the possibility that premature discontinuation may occur. Premature discontinuation carries its own set of problems, including difficulty in reestablishing artificial airways and compromised gas exchange. It has been estimated that as much as 42% of the time that a medical patient spends on a mechanical ventilator is during the discontinuation process.[3] This percent is likely to be much higher in patients with more slowly resolving lung disease processes.

There are a number of important issues involved in the management of a mechanically ventilated patient whose disease process has begun to stabilize and/or reverse such that the discontinuation of mechanical ventilation becomes a consideration. First, an understanding of all the reasons that a given patient required a mechanical ventilator is needed. Only with this understanding can medical management be optimized. Second, assessment techniques to identify patients who are capable of ventilator discontinuation need to be utilized. Ideal assessment techniques should be able to easily and safely distinguish which pa-

The Writing Committee, on behalf of the Panel, includes Neil R MacIntyre MD FAARC (Chairman), Deborah J Cook MD, E Wesley Ely Jr MD MPH, Scott K Epstein MD, James B Fink MSc RRT FAARC, John E Heffner MD, Dean R Hess PhD RRT FAARC, Rolf D Hubmayr MD, and David J Scheinhorn MD. Other members of the panel include Suzanne Burns RN MSN CCRN RRN, David Chao MD, Andres Esteban MD, Douglas R Gracey MD, Jesse B Hall MD, Edward F Haponik MD, Marin H Kollef MD, Jordi Mancebo MD, Constantine A Manthous MD, Arthur S Slutsky MD, Meg A Stearn-Hassenpflug MS RD, and James K Stoller MD MSc FAARC.

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Two new neutrophil subsets define a discriminatory sepsis signature This study showed that these two new neutrophil subsets were specific for sepsis and detectable by routine flow cytometry using seven markers. The demonstration here that a simple blood analysis distinguishes sepsis from other inflammatory conditions represents a key biological milestone that can immediately translate into improvements in patient care. January 1, 2022 AJRCCM This is the first study to show that the size of effects of low to moderate exposure levels of air pollution during pregnancy in postnatal lung function is significantly greater in premature infants than in healthy infants from the later age of 44 weeks. The effect was best seen in moderate premature infants late in the day. January 1, 2022 AJRCCM Authors identified six molecular traits that characterize the morphological progression of HPF and are associated with in vivo clinical behavior. Comparing IPF with FHP, the transcriptome landscape was significantly determined by local disease rather than only by diagnosis. 1 January 2022 AJRCCM 1. NOLAN JP, SOAR J, Cariou A, et al. European Council of the Council and the European Society of Intensive Care Medicine Guidelines for Post-Resuscitation Care 2015: Section 5 of the European Guidelines of the Resuscitation Council for Resuscitation 2015. Resuscitation. 2015; 95: 202, 222. DOI: 10.1016 / J.Resuscti.2015.07.018. [PubMed] [CrossRef] [Google Scholar] 2. Nolan JP, SOAR J, Cariou A, et al. European Resuscitation Council and European Society of Guidelines for Intensive Care Medicine 2015 for post-resuscitation care. Intensive Care Med. 2015; 41: 2039- 2056. DOI: to 10.1007 / S00 134-015-4051-3. [Pubmed] [CrossRef] [Google Scholar] 3. Nolan JP, Hazinski MF, Aickin R, et al. Part 1: Executive Summary: 2015 international cardiopulmonary resuscitation and emergency cardiovascular science with treatment recommendations. Resurrection. 2015; 95: E1-E31. E31.[PubMed] [CrossRef] [Google Scholar]4. Olasveengen TM, de Caen AR, Mancini ME, et al. 2017 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Sciences with summary of treatment recommendations. Resuscitation. 2017;121:201â214. doi: 10.1016/d.resuscitation.2017.10.021. [PubMed] [CrossRef] [Google Scholar]5. Soar J, Donnino MW, Maconochie I, et al. 2018 international consensus on cardiopulmonary resuscitation and emergency cardiovascular care sciences with summary of treatment recommendations. Resuscitation. 2018;133:194â206. doi: 10.1016/d.resuscitation.2018.10.017. [PubMed] [CrossRef] [Google Scholar]6. Soar J, Maconochie I, Wyckoff MH, et al. 2019 international consensus on cardiopulmonary resuscitation and emergency cardiovascular care sciences with treatment recommendations. Resuscitation. 2019;145:95â150. doi: 10.1016/d.resuscitation.2019.10.016. [PubMed] [CrossRef] [Google Scholar]7. Nolan JP, Maconochie I, Soar J, et al. Executive Summary 2020 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Sciences with Treatment Recommendations. Resuscitation. 2020;156:A1âA22. doi: 10.1016/d.resuscitation.2020.09.009. [PubMed] [CrossRef] [Google Scholar]8. Morley PT, Atkins DL, Finn JC, et al. Process of evaluation of evidence and management of possible conflicts of interest. Resuscitation. 2020;156:A23âA34. doi: 10.1016/d.resuscitation.2020.09.011. [PubMed] [CrossRef] [Google Scholar]9. Soar J, Berg KM, Andersen LW, et al. Support for Advanced Adult Life: 2020 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Sciences with Treatment Recommendations. Resuscitation. 2020;156:A80âA119. doi: 10.1016/d.resuscitation.2020.09.012. [PubMed] [CrossRef] [Google Scholar]10. Lemkes JS, Janssens GN, van der Hoeven NW, et al. Coronary angiography after cardiac arrest without elevation of the ST segment. N Engl J Med.Doi: 10.1056 / nejmoa1816897 [Pubmed] [Crossref] [Google Scholar] 11. Collet JP, Thiele H, Barbato E, et al. (2020) 2020 ESC Guidelines for the management of acute coronary syndromes in patients who present without persistent elevation of the ST segment. EUR Heart J. 10.1093 / EURHEARTJ / EHAA575 [Pubmed] 12. Kapur J, Elm J, Chamberlain JM, et al. Random test of three anticonvulsant medications for the state epiller. N Engl J Med. 2019; 381: 2103â € "2113. Doi: 10.1056 / nejmoa1905795 [PMC Free Article] [PubMed] [Crossref] [Google Scholar] 13. LASCARROU JB, MERDJI H, GOUGE A, ET AL. Directed temperature handling for cardiac arrest with a non-folding rhythm. N Engl J Med. 2019; 381: 2327â € "2337. Doi: 10.1056 / nejmoa1906661 [Pubmed] [Crossref] [Google Scholar] 14. Dankiewicz J, Cronberg T, Lilja G, et al. Hypothemy directed against normothermia directed after a cardiac arrest outside of hospitality (TTM2 :) A randomized clinical-ratio and design. AM Heart J. 2019; 217: 23â € "31. Doi: 10,1016 / J.AHJ.2019.06.012 [Pubmed] [Crossref] [Google Scholar] 15. Sandroni C, D'Arrigo S, Cacciola S, et al. Poor prediction of a neurological result in survivors in coma of heart unemployment: a systematic review. Intensive care Med. 2020; 46: 1803-1851. Doi: 10.1007 / S00134-020-06198-W [PubMed] [Crossref] [Google Scholar] 16. Sinning C, Ahrens I, Cariou A, et al. The Cardiac Detention Center for the Treatment of Subweb cardiac arrest due to alleged cardiac cause - Objectives, function and structure: Cardiovascular care partnership document accuses of the European Cardiology Society (AVCV), European Association of Coronary Interventions Percutaneous (EAPCI,) European Heart Rhythm Association (Ehra77,) European Resuscitation Council (ERC,) YEUNG J, T, Bray J, Reynolds J, Skrifvars MB. Are you worried in a cardiac arrest center Improve the result after a cardiac arrest outside the hospital? A systematic review. Resurrection 2019; 137: 102- 115. DOI: Ã, 10.1016 / j.resuscation.2019.02.006. [Pubmed] [Crossref] [Google Scholar] 18. Nolan JP, Neumar RW, Adrie C, et al. Sinder after delivery: epidemiology, physiopathology, treatment and prediction. A scientific declaration of the International Committee on Resuscitation Liaison; the cardiovascular care committee of the American heart association; the Council on cardiovascular surgery and anesthesia; the Council on cardiopulmonary, perioperative and critical care; The Clinical Cardiology Council; The advice on stroke. Resurrection 2008; 79: 350- 379. DOI: Ã, 10.1016 / j.resusctit.2008.09.017. [Pubmed] [Crossref] [Google Scholar] 19. Mongardon N, Dumas F, Ricome S, et al. Postcardio detention syndrome: from immediate resuscitation to long-term result. Intensive care of Ann. 2011; 1: 45. DOI: Ã, 10.1186 / 2110-5820-1-45. [Free PMC] [PubMed] [Crossref] [Google Scholar] 20. Stub D, Bernard S, Duffy SJ, Kaye DM. Sindrome postal arrest: a review of the therapeal strategies. Circulation. 2011; 123: 1428- 1435. DOI: Ã, 10.1161 / circuulaha.110.988725. [Pubmed] [Crossref] [Google Scholar] 21. Sekhon MS, Ainslie PN, Griesdale de. Fingopophysology Cloth of hypotic ischial cerebral injury after a cardiac arrest: a "two blows" model. Care Crit. 2017; 21: 90. DOI: Ã, 10.1186 / S13054-017-1670-9. [Free Article of PMC] [Pubmed] [Crossref] [Google Scholar] 22. Witten L, Gardner R, Holmberg MJ, et al. Reasons for death in patients resurrected with the success of cardiac arrest outside the hospital and hospital. Resurrection 2019; 136: 93- 99. DOI: Ã, 10.1016 / j.resuscation.2019.01.031. [Free PMC Article] [PubMed] [Crossref] [Google Scholar] 23. V, Dumas F, Mongardon N, et al. Mortality of the intensive care unit after a cardiac arrest: the relative contribution of the injury of blows and brain in a great great intensive care med. 2013; 39: 1972- 1980. doi: â 10.1007 / S00134-013-3043-4. [pubmed] [crossref] [google scholar] 24. laver s, farrow c, turner d, nolan j. mode of death after admission to an intensive care unit after a heart arrest. intensive care med. 2004; 30: 2126- 2128. doi: â 10.1007 / S00134-004-2425-Z. [pubmed] [crossref] [google scholar] 25. olasveengen tm, sunda k, brunborg c, thowsen j, steen pa, wik l. administration of intravenous drugs during cardiac arrest outside the hospital: a random trial. ha. 2009; 302: 2222- 2229. doi: â 10.1001 / JAMA.2009.1729. [pubmed] [crossref] [google scholar] 26. dragance i, rundgren m, englund e, friberg h, cronberg t. the influence of the induced hypothermia and the delayed prognosis in the mode of death after cardiac resuscitation. 2013; 84: 337-342. doi: â 10.1016 / J.Resusctit.2012.09.015. [pubmed] [crossref] [google scholar] 27. nielsen n, wetterslev j, cronberg t, et al. temperature management directed at 33 degrees c compared to 36 ° c after a heart arrest. - engl j med. 2013; 369: 2197- 2206. doi: â 10.1056 / NEJMOA1310519. [pubmed] [crossref] [google scholar] 28. cha kc, kim hi, kim oh, et al. echocardiographic patterns of postresostiation myocardial dysfunction. resuscitation. 2018; 124: 90, 95. doi: â 10.1016 / J.Resuscation.2018.01.019. [pubmed] [crossref] [google scholar] 29. jentzer jc, anavekar ns, mankad sv, et al. changes in left ventricular systolic and diastolic function in serial echocardiography after cardiac arrest outside the hospital. 2018; 126: 1- 1. doi: â 10.1016 / J.Resuscation.2018.01.050. [pubmed] [crossref] [google scholar] 30. laurent i, monchi m, chiche jd, et al. reversible myocardial dysfunction in cardiac arrest survivors outside the hospital. j am coll cardiol. 2002; 40: 2110- 2116. doi: â 10.1016 / S0735-1097 (02) 02594-9. [pubmed] [crossref]Scholar] 31. Ruiz-Bailen M, Aguayo de Hoyos E, Ruiz-Navarro S, et al. Reversible myocatic dysfunction after cardiopulmonary resuscitation. cardiopulmonary 2005; 66: 175 "181. Doi: Ã, 10,1016 / j. Resucitación.2005.01.012. [Pubmed] [Crossref] [Google Scholar] 32. Chalkias A, Xanthos T. Physiology and pathogÃ © nesis of myocardic post-resurrection stunning. Heart Fail Rev. 2012; 17: 117Ã ¢ â € 128. Doi: Ã, 10.1007 / S10Â 741-011-9255-1. [Pubmed] [Crossref] [Google Scholar] 33. Wardi G, Blanchard D, Dittrich T, Kaushal K, Sell R. Right ventricular dysfunction and echocardiographic parameters in the first 24 h after resuscitation in the cardiac postparial patient: Retrospective cohort study. Resuscitation. 2016; 103: 71Ã ¢ Â »74. Doi: Ã, 10,1016 / j.reanimation.2016.03.009. [Pubmed] [Crossref] [Google Scholar] 34. Lerchiari, Safar P, Klein E, Diven W. Visceral, hematological and bacteriological changes and neurological outcome after a cardiac arrest in dogs. The post-resurrection visceral syndrome. Resuscitation. 1993; 25: 119Ã ¢ Â »136. Doi: Ã, 10.1016 / 0300-9572 (93) 90Â 090-D. [Pubmed] [Crossref] [Google Scholar] 35. Adrie C, Monchi M, Laurent I, et al. Coagulopathy After successful cardiopulmonary resuscitation after cardiac arrest: implication of the via anticoagulant of the protein C. AM COLL Cardiol. 2005; 46: 21 "28. Doi: Ã, 10.1016 / j.jacc.2005.03.046. [Pubmed] [Crossref] [Google Scholar] 36. Grimaldi D, Guivark E, Neveux N, et al. The markers of intestinal lesion are associated with endotoxemia in patients resurrected with success. Resuscitation. 2013; 84: 60Â »65. Doi: Ã, 10,1016 / j.reanimation.2012.06.010. [Pubmed] [Crossref] [Google Scholar] 37. Roberts BW, Kilgannon JH, Chansky Me, et al. Gluting organic dysfunction after the return of spontaneous circulation in the cardiac arrest syndrome. CRA CARE MED 2013; 41: 1492Ã ¢ â € 1501. Doi: Ã, 10.1097 / ccm.0b013E31Â 828A39E9. [Pubmed] [Crossref] [Google Scholar] 38. Bottiger BW, Bohrer H, Boker T, Motsch J, Aulmann M, Martin E. The liberation of platelet factor 4 in patients undergoing cardiopulmonary resuscitation can be affected by platelet activation? Acta Anaesthesiol Scand. 1996; 40: 631Ã ¢ Â »635. [PubMed] [CrossRef] [Google Scholar]39. Bottiger BW, Motsch J, Braun V, Martin E, Kirschfink M. MarcÃ3 complement and leukocyte activation and increased concentrations of soluble endothelial adhesive molecules during cardiopulmonary resuscitation and early reperfusion after cardiac arrest. human beings. Crit Care Med. 2002;30:2473Â”2480. doi:Ä¯ 10.1097/00 003 246-200 211 000-00 012. [PubMed] [CrossRef] [Google Scholar]40. Bottiger BW, Motsch J, Bohrer H, et al. The activation of blood clotting after cardiac arrest is not adequately balanced by the activation of endogenous fibrinolysis. Circulation. 1995;92:2572Â”2578. doi:Ä¶ 10.1161/01.CIR.92.9.2572. [PubMed] [CrossRef] [Google Scholar]41. Viersen VA, Greuters S, Korfage AR, et al. Hyperfibrinolysis in cardiac arrest outside the hospital is associated with markers of hypoperfusion. Resuscitation. 2012;83:1451Â”1455. doi:Ä¶ 10.1016/j.reanimation.2012.05.008. [PubMed] [CrossRef] [Google Scholar]42. Duvekot A, Viersen VA, Dekker SE, et al. Low levels of brain oxygenation during resuscitation in out-of-hospital cardiac arrest are associated with hyperfibrinolysis. Anesthesiology. 2015;123:820¢”829. doi:Ä¶ 10.1097/ALN.0 000 000 000 000 806. [PubMed] [CrossRef] [Google Scholar]43. Buchtele N, Schorgenhofer C, Spiel AO, Jilma B, Schwameis M. Increased fibrinolysis as a specific marker of poor outcome after cardiac arrest. Crit Care Med. 2018;46:e995Â”e1001. doi:Ä¶ 10.1097/CCM.0 000 000 003 352. [Free article by PMC] [PubMed] [CrossRef] [Google Scholar]44. Adrie C, Adib-Conquy M, Laurent I, et al. Successful cardiopulmonary resuscitation after cardiac arrest as syndromes Ä”sepsis.Ä” Circulation. 2002;106:562Â”568. doi:Ä© 10.1161/01.CIR.0 000 023 891.80 661.AD. [PubMed] [CrossRef] [Google Scholar]45. Adrie C, Laurent I, Monchi M, Cariou A, Dhainaou JF, Spaulding C. Postresuscitation disease after cardiac arrest: a sepsis syndrome? Curr Opin Crit Care. doi:Ã 10.1097/01.ccx.0 000 126 090.06 275.fe. [PubMed] [CrossRef] [CrossRef] Scholar] 46. Huet O, Dupic L, Batteux F, et al. POSTRESOSUION Syndrome: Potential role of endothelial damage induced by hydroxyl radicals. Crit Care Med. 2011; 39: 1712-1720. DOI: at 10.1097 / CCM.0B013E3 182 186D42. [PubMed] [CrossRef] [Google Scholar] 47. Fink K, Schwarz M, Feldbrugge L, et al. Severe endothelial injury and subsequent repair in patients after successful cardiopulmonary resuscitation. Care crit. 2010; 14: R104. DOI: to 10.1186 / CC9050. [Free article by PMC] [PubMed] [CrossRef] [Google Scholar] 48. Van Genderen Me, Lima A, Akkerhuis M, Bakker J, Van Bommel J. Persistent peripheral perfusion and peripheral abnormalities after cardiac arrest outside the hospital are associated with poor survival. Crit Care Med. 2012; 40: 2287- 2294. DOI: at 10.1097 / CCM.0B013E31 825 333B2. [PubMed] [CrossRef] [Google Scholar] 49. Bro-Jeppesen J, Kjaergaard J, Wanscher M, et al. Systemic inflammatory response and possible prognostic implications after cardiac arrest outside the hospital: a sub-study of the target temperature management trial. Crit Care Med. 2015; 43: 1223- 1232. DOI: 10.1097 / CCM.0 000 000 000 000 937. [PubMed] [CrossRef] [Google Scholar] 50. Sutherasan Y, Penuelas O, Muriel A, et al. Management and outcome of mechanically ventilated patients after cardiac arrest. Care crit. 2015; 19: 215. DOI: 10.1186 / S13 054-015-0922-9. [PMC free article] [PubMed] [CrossRef] [Google Scholar] 51. Peberdy Ma, Andersen LW, Abate A, et al. Inflammatory markers after resuscitation of cardiac arrest outside the hospital, a possible observational study of multicenter. Resurrection. 2016; 103: 117- 124. DOI: 10.1016 / J.Resuscation.2016.01.006. [PubMed] [CrossRef] [Google Scholar] 52. Bro-Jeppesen J, Johansson Pi, Hassager C, et al. Endothelial activation/injury and associations with severity of post-cardiac arrest syndrome and mortality after cardiac arrest outside the hospital. 2016; 107: 71- 79. DOI: Ã 10.1016 / J.Resusctit.2016.08.006. [PubMed] [CrossRef] [Google Scholar] 53. Bro-jeppeesen j, j, Pi, kjaergaard j, et al. The level of systemic inflammation and endothelial lesion is associated with cardiovascular dysfunction and vasopressor support in cardiac postparial patients. Resuscitation. 2017; 121: 179Ã ¢ Â »186. Doi: Ã, 10,1016 / j.reanimation.2017.09.019. [Pubmed] [Crossref] [Google Scholar] 54. Chelly J, Mongardon N, Dumas F, et al. Benefits of an early and systematic image procedure after a cardiac arrest: Insights from The Procat (Region of Paris Out of Hospital Cardiac Arrest). Resuscitation. 2012; 83: 1444 "1450. Doi: Ã, 10,1016 / j.reanimation.2012.08.321. [Pubmed] [Crossref] [Google Scholar] 55. Arnaout M, Mongardon N, Deye N, et al. Extrahospital cardiac arrest due to cerebral cause: Epidemiology, clinical characteristics and outcome in a multicast cohort. Crit Care Med. 2015; 43: 453Â »460. Doi: Ã, 10.1097 / ccm.0 000 000 000 000 722. [Pubmed] [Crossref] [Google Scholar] 56. Inamasu J, Miyatake S, Tomioka H, et al. Subarachnoid hemorrhage as a cause of extra-promotional cardiac arrest: Prospective study of computerized tomography. Resuscitation. 2009, 80: 977Â »980. Doi: Ã, 10,1016 / j.reanimation.2009.05.010. [Pubmed] [Crossref] [Google Scholar] 57. Shin J, Kim K, Lim and, et al. Incidence and clinical characteristics of intracranial hemorrhage causing extra-hospital cardiac arrest: a multicast retrospective study. In J Emerg Med. 2016; 34: 2326Ã ¢ â € ¢ â² ²2330. Doi: Ã, 10.1016 / j.jem.2016.08.043. [Pubmed] [Crossref] [Google Scholar] 58. Legriel S, Bougouin W, Chocron R, et al. Early hospital treatment of cardiac arrest by neurologic cause: Diagnostic difficulties and treatment problems. Resuscitation. 2018; 132: 147Ã ¢ â € 155. Doi: Ã, 10,1016 / j.reanimation.2018.08.004. [Pubmed] [Crossref] [Google Scholar] 59. Caputo ND, Stahmer C, LIM G, Shah K. Computed tomography of the entire body leads to a better survival compared to selective exploration in patients with trauma: a systematic review and methanalysis. J Acute traumatology trauma. doi:Ã 10.1097/TA.0 000 000 000 000 414. [PubMed] [CrossRef] [CrossRef] Erudito] 60. LOTT CT, Alfonzo A, Barelli A, Gonzáz-salvado V, Hinkelbein J, Nolan JP, Paal P, Perkins GD, Thies KC, Yeung J, Zideman Da, Soar J. (2021) European Reanimation Council Guidelines 2021: Cardiac arrest in special circumstances. Resurrection61. Berg km, Grossesteuer Av, Uber A, Patel Pv, Donnino MW. Intubation is not a marker for the coma after cardiac arrest in the hospital: a retrospective study. Resurrection. 2017; 119: 18- 20. DOI: 10.1016 / J.Resuscation.2017.07.024. [PubMed's free article] [CrossRef] [Google Scholar] 62. BENGER JR, Kirby K, Black S, et al. Effect of a strategy of a supraglottic airway device vs VS Tracheal Intubation during cardiac arrest outside the hospital in the functional result: Airways-2 randomized clinical trial. JAMA. 2018; 320: 779- 791. DOI: 10.1001 / JAMA.2018.11597. [PubMed] [CrossRef] [Google Scholar] 63. Higgs A, McGrath BA, Goddard C, et al. Guidelines for the management of tracheal intubation in critically ill adults. BR J ANAESTH. 2018; 120: 323- 352. DOI: 10.1016 / J.BJA.2017.10.021. [Pubmed] [CrossRef] [Google Scholar] 64. Nolan JP, Kelly Fe. Airway challenges in critical care. Anesthesia. 2011; 66 (Suppl 2): 81-92. DOI: 10.1111 / J.1365-2044.2011.06937.x. [PubMed] [CrossRef] [Google Scholar] 65. Miller M, Groombridge CJ, Lyon R. Hemodynamic changes to a midazolam protocol "fentanylâ€" Rocuronium for pre-hospital anesthesia after the return of spontaneous circulation after a heart arrest. Anesthesia. 2017; 72: 585- 591. DOI: 10.1111 / ANAE.13809. [PubMed] [CrossRef] [Google Scholar] 66. Holmberg MJ, Nicholson T, Nolan JP, et al. Oxygenation and ventilation targets after a heart arrest: a systematic review and a meta-analysis. Resurrection. 2020; 152: 107- 115. DOI: Â 10.1016 / J.Resuscation.2020.04.031. [PubMed] [CrossRef] [Google Scholar] 67. Get out.cerebral anoxica-isquÂ©mica. Neurol clin. 2017; 35: 601- 611. DOI: Ã 10.1016 / J.NCL.2017.06.001. [PubMed] [CrossRef] [Google Scholar] 68. Endisch C, Westhall E, E, M, et al. Hypoxic-ischemic encephalopathy evaluated by brain autopsy and neurocognosttication after cardiac arrest. Jama Neurol. 2020; 77 (11): 1, 10. DOI: 10.1001 / Jamaneurol.2020.2340. [PMC free article] [PubMed] [CrossRef] [Google Scholar] 69. Llitjos JF, Mira JP, Duranteu J, Cariou A. Toxicity of hyperoxia After cardiac arrest: What is the evidence? Intensive Care of Ann. 2016; 6: 23. DOI: to 10.1186 / S13 613-016-0126-8. [Free article by PMC] [PubMed] [CrossRef] [Google Scholar] 70. Bougle A, Daviaud F, Bougouin W, et al. Determinants and meaning of cerebral oximetry after cardiac arrest: a prospective cohort study. Resurrection. 2016; 99: 1 â ¬ 6. DOI: 10.1016 / J.Resuscation.2015.11.011. [PubMed] [CrossRef] [Google Scholar] 71. Rosenthal G, Hemphill JC, 3RD, Sorani M, et al. Oxygen tension in brain tissue is more indicative of oxygen diffusion than oxygen supply and metabolism in patients with traumatic brain injury. Crit Care Med. 2008; 36: 1917-1924. DOI: 10.1097 / CCM.0B013E3 181 743D77. [PubMed] [CrossRef] [Google Scholar] 72. LIU Y, ROSENTHAL RE, Haywood y, Miljkovic-Lolic M, Vanderhoek JY, Fiskum G. Normoxic ventilation After cardiac arrest reduces the oxidation of brain lipids and improves the neurological result. Career. 1998; 29: 1679-1686. DOI: 10.1161 / 01.str.29.8.1679. [PubMed] [CrossRef] [Google Scholar] 73. PILBER J, WEATHALL M, SHIRSCLIFFE P, Bellomo R, Young P, Beasley R. The effect of hyperoxia after cardiac arrest, a systematic review and methanolysis of animal tests. Resurrection. 2012; 83: 417-422. DOI: 10.1016 / J.Resuscitt.2011.12.021. [PubMed] [CrossRef] [Google Scholar] 74. Researchers i-r. Clinical Trials of the New Zealand Intensive Care Society of New Zealand G et al. Conservative oxygen therapy during mechanical ventilation in the ICU. N Engl J Med. 2020; 382: 989- DOI: 10.1056 / NEJMOA1903297. [Pubmed] [CrossRef] [Google Scholar] 75. Jakkula P, Reinikainen M, Hastbacka J, et al. Directed at two different levels of arterial and arterial carbon dioxide.After cardiac arrest and resuscitation: A randomized pilot test. Intensive care Med. 2018; 44: 2112â € "2121. Doi: 10.1007 / S00134-018-5453-9. [Pubmed] [Crossref] [Google Scholar] 76. Bray Je, Hein C, Smith K, et al. Oxygen degree after the resuscitation of cardiac arrest outside of hospitality: a randomized and multicoster controlled pilot study (the Pilot Essay of the Exact) resurrection. 2018; 128: 211 â € "215. Doi: 10,1016 / j.resuscitation.2018.04.019. [Pubmed] [Crossref] [Google Scholar] 77. Thomas M, Voss S, Benger J, Kirby K, Nolan JP. Randomized comparation of 100% oxygen efficiency against oxygen Titrated in patients with sustained return of spontaneous circulation after hospital cardiac arrest: a feasibility study. Proxy: Oxygenation stop Post ROSC. BMC Emerg Med. 2019; 19: 16. Doi: 10.1186 / S12873-018-0214-1. [Pubmed] [Crossref] [Google Scholar] 78. Young P, Bailey M, Bellomo R, et al. Hyperoxica or Normoxic Therapy Therapy after a cardiac arrest outside of hospitality (hot or not): a randomized controlled viability test. Resurrection 2014; 85: 1686-1691. Doi: 10,1016 / j.resuscitation.2014.09.011. [Pubmed] [Crossref] [Google Scholar] 79. KUISMA M, BOYD J, VoIPIO V, Alaspaa A, Roine Ro, Rosenberg P. Comparison of 30 and 100% oxygen concentrations inspired during the first post-resurrection period: A randomized controlled pilot study. Resurrection 2006; 69: 199â € "206. Doi: 10,1016 / j.resuscitation.2005.08.010. [Pubmed] [Crossref] [Google Scholar] 80. Young P, Mackle D, Bellomo R, et al. Conservative oxygen therapy for adults ventilated mechanically with suspicion of hypoxic ischool encephalopathy. Intensive care Med. 2020; 46: 2411â € "2422. Doi: 10.1007 / S00134-020-06196-Y. [Pubmed] [Crossref] [Google Scholar] 81. Humaloja J, Litonius E, Efendijev I, et al. Early hyperoxemia is not associated with the result of cardiac arrest. Resuscitation. 2019; 140: 185â € "193. Doi: [PubMed] [PubMed] [Google Scholar] 82. Young P, Pilcher J, Patel M, et al. Delivery of oxygen titled through an autoinflowed reanimation bag. Resurrection 2013; 84: 391- 394. DOI: Ã, 10.1016 / j.resusctit.2012.08.330. [Pubmed] [Crossref] [Google Scholar] 83. Nelskyla A, Parr MJ, Skrifvars MB. Prevalence and factors that correlate with the exposure to hyperoxia after the cardiac arrest, a study of a single observational center. Scand J Trauma ResanCom Emerg Med. 2013; 21: 35. DOI: Ã, 10.1186 / 1757-7241-21-35. [Free PMC Article] [Pubmed] [Crossref] [Google Scholar] 84. Storm C, Leithner C, Krannich A, et al. Regional saturation of cerebral oxygen after a cardiac arrest in 60 patients, a prospective results study. Resurrection 2014; 85: 1037-1041. DOI: Ã, 10.1016 / j.resusctit.2014.04.021. [Pubmed] [Crossref] [Google Scholar] 85. Jakkula P, Hastbacka J, Reinikainen M, et al. Almost infrared spectroscopy after a cardiac arrest outside the hospital. Care Crit. 2019; 23: 171. DOI: Ã, 10.1186 / S13054-019-2428-3. [Free Article of PMC] [Pubmed] [Crossref] [Google Scholar] 86. Spindelboeck W, GEMES G, Strasser C, et al. Blood blood gases during and its dynamic changes after cardiopulmonary resuscitation: a prospective clinical study. Resurrection 2016; 106: 24 - 29. DOI: Ã, 10.1016 / j.resusctit.2016.06.013. [Pubmed] [Crossref] [Google Scholar] 87. Mekontso Desasta A, Charron C, Devake J, et al. The impact of acute hypercapnia and the increased positive end expiratory pressure on the function of the right ventricular in severe acute respiratory distress syndrome. Intensive care Med. 2009; 35: 1850- 1858. DOI: Ã, 10.1007 / S00134-009-1569-2. [Free PMC] [PubMed] [Crossref] [Google Scholar] 88. Curley G, Kavanagh BP, Laffey JG. Hypocapnia and the injured brain: more damage what benefit. Crit Care Med. 2010; 38: 1348- 1359. DOI: Ã, 10.1097 / ccm.0b013E3181D8CF2B. [Pubmed] [Google Scholar] 89. Pynnonen L, Falkenbach P, Chamberlainen A, Lonnrot K, Over-awkward A, Tenhunen J. Hipotermia TerapÃ © Utica DespuÃ © S de un Arresto Cardão, PerfusiÃ³n Cerebral y Metabolismo. Metabolism. Normocapnia of upper and lower threshold. Reanimation. 2011;82:1174»1179. doi:Â 10.1016/j.reanimation.2011.04.022. [PubMed] [CrossRef] [Google Scholar]90. Thompson BT, Chambers RC, Liu KD. Acute respiratory syndrome. N Engl J Med. 2017;377:562»572. doi:Â 10.1056/NEJMra1 608 077. [PubMed] [CrossRef] [Google Scholar]91. Serpa Neto A, Cardoso SO, Manetta JA, et al. Association between the use of protective lung ventilation with lower current volumes and clinical outcomes in patients without acute respiratory syndrome: a meta-analysis. JAMA. 2012;308:1651â»1659. doi:Â 10.1001/jama.2012.13 730. [PubMed] [CrossRef] [Google Scholar]92. Johnson NJ, Caldwell E, Carlbom DJ, et al. Acute respiratory stress syndrome after extrahospital cardiac arrest: Incidence, risk factors and outcomes. Reanimation. 2019;135:37»44. doi:Â 10.1016/j.reanimation.2019.01.009. [PubMed] [CrossRef] [Google Scholar]93. Czerwinska-Jelonkiewicz K, Grand J, Tavazzi G, et al. (2020) Acute respiratory insufficiency and inflammatory response after extrahospital cardiac arrest: results of the pilot study of post-cardiac unemployment syndrome (PCAS). Eur Heart J Acute Cardiovasc Care 2 048 872 619 895 126 [PubMed]94. Kim JS, Kim YJ, Kim M, et al. Impact of pulmonary conformity on neurological outcome in patients with acute respiratory syndrome after extrahospital heart attack. J Clin Med. 2020;9:527. doi:Â 10.3390/jcm9 020 527. [PubMed free article] [CrossRef] [Google Scholar]95. Gonzalvo R, Marti-Sistac O, Blanch L, López-Aguilar J. Bench-to-bedside review: brain-pulmon interaction in the critical unrevised disease. Crit Care. 2007;11:216. doi:Â 10.1186/cc5930. [PubMed free article] [CrossRef] [Google Scholar]96. Eastwood GM, Schneider AG, Suzuki S, et al. Mild therapeutic hypercapnia directed after a heart attack: a randomized controlled trial of phase II(The CCC assay) resuscitation. 2016; 104: 83Ã ¢ ¢ â € 90. Doi: Ã, 10,1016 / j.resuscitation.2016.03.023. 10.1016 / j.resuscitation.2016.03.023. [Crossref] [Google Scholar] 97. VaArSalo J, Bendel S, Reinikainen M, et al. Gaseous arterial tension after outgoing cardiac arrest resuscitation: Association with long-term neurologic outcome. Crit Care Med. 2014; 42: 1463Ã ¢ â € 1470. Doi: Ã, 10,1097 / ccm.0 000 000

heart attack: ST:PEARL study. Circulation. 2020;142:2002â2012. doi: 10.1161/CIRCULATIONAHA.120.049 569 [PubMed] [CrossRef] [Google Scholar]117. Bougouin W, Dumas F, Karam N, et al. Should we perform an immediate coronary angiogram in all patients after cardiac arrest? Insights From a Large French Registry. JACC Cardiovasc Interv. 2018;11:249â256. doi: 10.1016/j.jcin.2017.09.011 [PubMed] [CrossRef] [Google Scholar]118. Oksanen T, Skrifvars M, Wilkman E, Tierala I, Pettila V, Varpula T. Postresuscitation hemodynamics during therapeutic hypothermia after out-of-hospital cardiac arrest with ventricular fibrillation: a retrospective study. Resuscitation. 2014;85:1018-1024. doi: 10.1016/j.resuscitation.2014.04.026 [PubMed] [CrossRef] [Google Scholar]119. Uray T, Lamade A, Elmer J, et al. Phenotyped cardiac arrests: characterization in the bench and in bed of brain and cardiac injury based on etiology. Crit Care Med. 2018;46:e508âe515. doi: 10.1097/CCM.000 000 003 070 [PMC free article] [PubMed] [CrossRef] [Google Scholar]120. Anderson RJ, Jinadasa SP, Hsu L, et al. Subtypes of shock by left ventricular ejection fraction after cardiac arrest outside hospital. Watch out for the race. 2018;22:162. doi: 10.1186/s13 054-018-2078-x [PubMed] [CrossRef] [Google Scholar]121. Grand J, Kjaergaard J, Bro-Jeppesen J, et al. Cardiac output, heart rate and stroke volume during focused temperature management after cardiac arrest outside of hospitality: association with mortality and cause of death. Resuscitation. 2019;142:136â143. doi: 10.1016/d.resuscitation.2019.07.024 [PubMed] [CrossRef] [Google Scholar]122. Soar J, Callaway CW, Aibiki M, et al. Part 4: Support for Advanced Life: 2015 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Surgery Science with Treatment Recommendations. Resuscitation. 2015;95:e71â120. doi: 10.1016/d.resuscitation.2015.07.042 [PubMed] [CrossRef] [Google Trzeciak S, Jones AE, Kilgannon JH, et al. Meaning ofhypotension after cardiac arrest resuscitation. Crit Care Med. 2009;37:2895–2903. doi: 10.1097/CCM.0b013e3181b01d8c. [PubMed] [CrossRef] [Google Scholar]124. Kilgannon JH, Roberts BW, Stauss M, et al. Use of a standardized order established to reach the target temperature in the implementation of the therapeutic hypothermia after cardiac arrest: a feasibility study. Acad Emerg Med. 2008;15:499–505. doi: 10.1111/j.1553-2712.2008.00102.x. [PubMed] [CrossRef] [Google Scholar]125. Gaieski DF, Band RA, Abella BS, et al. Hemodynamic optimization led by early goals combined with therapeutic hypothermia in survivors in a heart attack coma outside the hospital. Resurrection. 2009;80:418-424. doi: 10.1016/j.resuscitation.2008.12.015. [PubMed] [CrossRef] [Google Scholar]126. Sunde K, Pytte M, Jacobsen D, et al. Implementation of a standardized treatment protocol for post-resurrection care after a heart attack outside the hospital. Resurrection. 2007;73:29–39. doi: 10.1016/j.resuscitation.2006.08.016. [PubMed] [CrossRef] [Google Scholar]127. Mullner M, Sterz F, Binder M, et al. Blood pressure after human heart attack and neurological recovery. Stroke. 1996;27:59–62. doi: 10.1161/01.STR.27.1.59. [PubMed] [CrossRef] [Google Scholar]128. Walters EL, Morawski K, Dorotta I, et al. Implementation of a post-cardia care package including therapeutic hypothermia and hemodynamic optimization in patients in a coma with spontaneous return after cardiac arrest outside of hospital: a feasibility study. Shock. 2011;35:360-366. doi: 10.1097/SHK.0b013e318204c106. [PubMed] [CrossRef] [Google Scholar]129. Kilgannon JH, Roberts BW, Jones AE, et al. Arterial pressure and neurological result after cardiac arrest was resurrected. Crit Care Med. 2014;42:2083–2091. doi: 10.1097/CCM.0000000000406. [PubMed] [CrossRef] [Google Scholar] 130. Beylin ME, Perman SM, Abella BS, et al. Pressureupper average with or without vasoactive agents is it With greater survival and better neurological results in the comatose survivors of cardiac arrest. Intensive care Med. 2013; 39: 1981, 1988. DOI: Ã, 10.1007 / S00134-013-3075-9. [Pubmed] [Crossref] [Google Scholar] 131. AMELOOT K, DEYNE C, EERTMANS W, ET AL. Hemodynamic optimization directed by the early target of cerebral oxygenation in comatose survivors after a cardiac arrest: the neuroprotect post-cardiac arrest assay. EUR Heart J. 2019; 40: 1804- 1814. DOI: Ã, 10,1093 / EURHEARTJ / EHZ120. [Pubmed] [Crossref] [Google Scholar] 132. Jakkula P, Pettyla V, Skrifvars MB, et al. The average blood pressure of low level or high normal is directed after a cardiac arrest and resuscitation: a random pilot assay. Intensive care Med. 2018; 44: 2091- 2101. DOI: Ã, 10.1007 / S00134-018-5446-8. [Free PMC Article] [PubMed] [Crossref] [Google Scholar] 133. Ameloot K, Gnerbrugge C, Meez I, et al. An observational study of infrared infrared spectroscopy on brain self-regulation in patients with post-cardiac births: short to break down hemodynamic targets of 'size unique'? Resurrection 2015; 90: 121- 126. DOI: Ã, 10.1016 / j.resuscan.2015.03.001. [Pubmed] [Crossref] [Google Scholar] 134. Ameloot K, Meez I, Gnerbrugge C, et al. Hemodynamic objectives during the therapy hypothermia after a cardiac arrest: a prospective observational study. Resurrection 2015; 91: 56-62. DOI: Ã, 10.1016 / j.resuscation.2015.03.016. [Pubmed] [Crossref] [Google Scholar] 135. Annoni F, Dell'Anna Am, Franchi F, et al. The impact of diastolic arterial pressure values in the neurological result of heart attack patients. Resurrection 2018; 130: 167-173. DOI: Ã, 10.1016 / j.resuscation.2018.07.017. [Pubmed] [Crossref] [Google Scholar] 136. Bro-Jeppesen J, Annborn M, Hassager C, et al. Hemodynamics and vasopressor support during temperature management to 33 degrees C compared to 36 ° C after a heart arrest outside the hospital: a post hoc study of the objective temperature management test *. Crit Care Med. 2015; 43: 318- 327. DOI: 10.1097 / CCM.0000000000691. CCM.0000000000691.[CrossRef] [Google Scholar]137. Chiu YK, Lui CT, Tsui KL. Impact of hypotension after the return of spontaneous circulation on survival in patients with extrahospital cardiac arrest. In the J Emerg Med. 2018;36:79»83. doi:Â 10.1016/j.ajem.2017.07.019. [PubMed] [CrossRef] [Google Scholar]138. Huang CH, Tsai MS, Ong HN, et al. Association of hemodynamic variables with intrahospital mortality and favorable neurological outcomes in post-parole cardiac care with directed temperature management. Reanimation. 2017;120:146»152. doi: 10.1016/j.reanimation.2017.07.009. [PubMed] [CrossRef] [Google Scholar]139. Laurikkala J, Wilkman E, Pettila V, et al. Average blood pressure and vasopressive load after extrahospital heart attack: association with neurological outcome at 1 year. Reanimation. 2016;105:116â»122. doi:Â 10.1016/j.reanimation.2016.05.026. [PubMed] [CrossRef] [Google Scholar]140. Janiczek JA, Winger DG, Coppler P, et al. Hemodynamic revival characteristics associated with better survival and shock resolution after cardiac arrest. Shock. 2016;45:613»619. doi:Â 10.1097/SHK.0 000 000 000 554. [PubMed's free article] [CrossRef] [Google Scholar]141. Russo JJ, Di Santo P, Simard T, et al. Optimal average blood pressure in extrahospital heart strike coma survivors: analysis of the area below the blood pressure thresholds. Reanimation. 2018;128:175»180. doi:Â 10.1016/j.reanimation.2018.04.028. [PubMed] [CrossRef] [Google Scholar]142. Young MN, Hollenbeck RD, Pollock JS, et al. The highest average blood pressure reached during therapeutic hypothermia is not associated with neurologically intact survival after a heart attack. Reanimation. 2015;88:158â»164. doi:Â 10.1016/j.reanimation.2014.12.008. [PubMed free article] [CrossRef] [Google Scholar]143. Scheinberg P, Jayne HW. Factors that influence brain blood flow and metabolism; review.1952;5:225»234. doi:Â 10.1161/01.CIR.5.2.225. [PubMed] [CrossRef] [Google Scholar]144. Scholar]144.SH, YM Arabi. Critical treatment of severe traumatic brain injury in adults. Scand J Trauma Resusc Emerg Med. 2012;20:12. doi:Ã¶ 10.1186/1757-7241-20-12. [Free article from PMC] [PubMed] [CrossRef] [Google Scholar]145. Sundgreen C, Larsen FS, Herzog TM, Knudsen GM, Boesgaard S, Aldershvile J. Self-regulation of cerebral blood flow in resuscitated patients from cardiac arrest. Stroke. 2001;32:128â”132. doi:Ã¶ 10.1161/01.STR.32.1.128. [PubMed] [CrossRef] [Google Scholar]146. Sekhon MS, Griesdale DE. Individualized perfusion targets in hypoxic ischemic brain injury after cardiac arrest. Crit Care. 2017;21:259. doi:Ã¶ 10.1186/s13 054-017-1832-9. [Free article by PMC] [PubMed] [CrossRef] [Google Scholar]147. Sekhon MS, Gooderham P, Menon DK, et al. Burden of cerebral hypoxia and optimal mean arterial pressure in patients with hypoxic ischemic brain injury after cardiac arrest. Crit Care Med. 2019;47:960Â”969. doi:Ã¶ 10.1097/CCM.0 000 000 003 745. [PubMed] [CrossRef] [Google Scholar]148. Hoiland RL, Robba C, Menon DK, Sekhon MS. Differential pathophysiological phenotypes of hypoxic ischemic brain injury: considerations for post-cardiac arrest trials. Intensive Care Med. 2020;46:1969¢”1971. doi:Ã¨ 10.1007/s00 134-020-06 200-5. [PubMed] [CrossRef] [Google Scholar]149. van den Brule JM, Vinke E, van Loon LM, van der Hoeven JG, Hoedemaekers CW. Mean cerebral artery flow, critical closing pressure and optimal mean arterial pressure in survivors of cardiac arrest in coma, an observational study. Resuscitation. 2017;110:85Â”89. doi:Ã¶ 10.1016/j.reanimation.2016.10.022. [PubMed] [CrossRef] [Google Scholar]150. Buunk G, van der Hoeven JG, AE de Meinders. Cerebrovascular reactivity in comatose patients resurrected from cardiac arrest. Stroke. 1997;28:1569â”1573. doi:Ã¶ 10.1161/01.STR.28.8.1569. [PubMed] [CrossRef] [Google Scholar]151. Lemiale V, Huet O, Vigue B, et al. Changes in cerebral blood flow and the oxygen during post-resurgation syndrome. resuscitation.doi: to 10.1016/d.resuscitation2007.06.028. [PubMed] [CrossRef] [Google Scholar]152. Rafi S, Tadie JM, Gacouin A, et al. Doppler ultrasound of cerebral blood flow for early prognosis after out-of-hospital cardiac arrest: DOTAC study. Resuscitation. 2019;141:188Â”194. doi:Ã¶ 10.1016/d.reanimation.2019.05.024. [PubMed] [CrossRef] [Google Scholar]153. Torgersen C, Meichtry J, Schmittinger CA, et al. Hemodynamic variables and functional outcome in hypothermic patients after out-of-hospital cardiac arrest. Resuscitation. 2013;84:798Â”804. doi:Ã¶ 10.1016/j.reanimation.2012.10.012. [PubMed] [CrossRef] [Google Scholar]154. Post H, Schmitto JD, Steendijk P, et al. Cardiac function during mild hypothermia in pigs: increased inotropia at the expense of diastolic dysfunction. Acta Physiol (Oxf) 2010;199:43Â”52. doi:Ã¨ 10.1111/j.1748-1716.2010.02 083.x. [PubMed] [CrossRef] [Google Scholar]155. Staer-Jensen H, Sunde K, Olasveengen TM, et al. Bradycardia during therapeutic hypothermia is associated with a good neurological outcome in comatose survivors of out-of-hospital cardiac arrest. Crit Care Med. 2014;42:2401Â”2408. doi:Ã¶ 10.1097/CCM.0 000 000 000 515. [PubMed] [CrossRef] [Google Scholar]156. Thomsen JH, Hassager C, Bro-Jeppesen J, et al. Sinus bradycardia during hypothermia in comatose survivors of out-of-hospital cardiac arrest, a new early marker of favorable outcome? Resuscitation. 2015;89:36â”42. doi:Ã¶ 10.1016/j.reanimation.2014.12.031. [PubMed] [CrossRef] [Google Scholar]157. Oksanen T, Tiainen M, Vaahersalo J, et al. Lower heart rate is associated with a good outcome at 1 year in post-resuscitation patients. Resuscitation. 2018;128:112â”118. doi:10.1016/d.reanimation.2018.05.001. [PubMed] [CrossRef] [Google Scholar]158. Adler C, Reuter H, Seck C, Hellmich M, Zobel C. Fluidotherapy and acute renal injury in cardiogenic shock after cardiac arrest. Resuscitation. 2013;84:194Â”199. doi: [PubMed] [CrossRef] [Google [Google GAMPER G, HAVEL C, ARRICH J, ET AL. Vasopressors for hypotense shock. Cochrane Syst Rev. 2016 database; 2: CD003709. [Free Article of PMC] [PubMed] [Google Scholar] 160. Levy B, Clere-Jehl R, LEGRAS A, ET AL. Epinephrine versus norepinephrine for cardiogenic shock after the acute myocardial infarction. J Am Coll Cardiol. 2018; 72: 173- 182. DOI: Ã, 10.1016 / j.jacc.2018.04.051. [Pubmed] [Crossref] [Google Scholar] 161. Kern KB, Hilwig RW, Berg Ra, et al. Postresosicion Away ourselves "Sistã" Sistã "Returles and Disfunction Disfunction: Treatment with Dobutamine. Circulation. 1997; 95: 2610- 2613. DOI: Ã, 10.1161 / 01.cir.95.12.2610. [Pubmed] [Crossref] [Google Scholar] 162. Vasquez A, Kern KB, Hilwig RW, Heidenreich J, Berg Ra, Ewy Ga. Optimum dosage of dobutamine to treat left ventricular dysfunction after resuscitation. Resurrection 2004; 61: 199-207. Doi: Ã, 10.1016 / j.resuscation.2004.01.002. [Pubmed] [Crossref] [Google Scholar] 163. Mentzelopoulos SD, Malachias S, Chamos C, et al. Vasopressin, steroids and epinephrine and neurologically favorable survival after cardiac arrest in the hospital: a randomized clinical assay. JAMA 2013; 310: 270- 279. DOI: Ã, 10.1001 / JAMA.2013.7832. [Pubmed] [Crossref] [Google Scholar] 164. Mentzelopoulos SD, Zakynthinos SG, Tzoufi M, et al. Vasopressin, epinephrine and corticosteroids for a cardiac arrest in the hospital. Inner arch med. 2009; 169: 15, 24. Doi: Ã, 10.1001 / archinternmed.2008.509. [Pubmed] [Crossref] [Google Scholar] 165. Tsai MS, Chuang Py, Huang Ch, et al. The use of subsequent steroids can improve the results of the survivors of cardiac arrests. Crit Care Med. 2019; 47: 167-175. DOI: Ã, 10.1097 / ccm.0000000000003468. [Pubmed] [Crossref] [Google Scholar] 166. Donnino MW, Andersen LW, Berg Km, et al. Corticosteroid therapy in refractory shock after cardiac arrest: a randomized, double-blind, placebo-controlled trial. Care Crit. 20: 82. DOI: Ã 10.1186 / S13054-016-1257-X. [ArtÃculo libre de PMC] [PubMed] [CrossRef] [Google Scholar] 167. Deakin CD, Morrison LJ, Morley PT, et al. 8: Support for advanced life: International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Sciences 2010 with treatment recommendations. Resuscitation. 2010;81 (Supplement 1):e93âe174. doi: 10.1016/d.resuscitation.2010.08.027. [PubMed] [CrossRef] [Google Scholar]168. Skrifvars MB, Pettila V, Rosenberg PH, Castren M. Multiple logistic regression analysis of intra-hospital factors related to 6-month survival in resuscitated patients with ventricular fibrillation outside the hospital. Resuscitation. 2003;59:319â328. doi: 10.1016/S0300-9572 (03) 00 238-7. [PubMed] [CrossRef] [Google Scholar]169. Manzo-Silberman S, Fichet J, Mathonnet A, et al. Percutaneous left ventricular assistance in shock post cardiac arrest: comparison of the intra-Arctic blood pump and IMPELLA Recover LP2.5. Resuscitation. 2013;84:609-615. doi: 10.1016/j.resuscitation.2012.10.001. [PubMed] [CrossRef] [Google Scholar]170. O'Neill BP, Cohen MG, Basir MB, et al. Results among patients transferred for revascularization with impella for acute myocardial infarction with cardiac shock of the cVAD registry. At J Cardiol. 2019;123:1214â1219. doi: 10.1016/j.amjcard.2019.01.029. [PubMed] [CrossRef] [Google Scholar]171. Ostenfeld S, Lindholm MG, Kjaergaard J, et al. Prognostic implication of cardiac arrest outside of hospitality in patients with cardiogenic shock and acute myocardial infarction. Resuscitation. 2015;87:57â62. doi: 10.1016/d.resuscitation.2014.11.010. [PubMed] [CrossRef] [Google Scholar]172. Thiele H, Zeymer U, Neumann FJ, et al. Intraaortic balloon support for myocardial infarction with cardiac shock. N Engl J Med. 2012;367:1287â1296. doi: 10.1056/NEJMoa1 208 410. [PubMed] [CrossRef] [Google Scholar]173. Ahmad Y, Sen S, Shun-Shin MJ, et al. Intra-aertic chocolates therapy for acute myocardial infarction: a meta-analysis. JAMA Intern Med. 2015;175:931-939. doi: 10.1001/jamainternmed.2015.0569. [PubMed] [CrossRef] Scholar]174. ouweneel dm, eriksen e, e,KD, et al. Percutaneous mechanical circulatory support versus intraaortic balloon in cardiogenic shock after acute myocardial infarction. J Am Coll Cardiol. 2017;69:278»287. doi:Â 10.1016/j.jacc.2016.10.022. [PubMed] [CrossRef] [Google Scholar]175. Priori SG, Blomstrom-Lundqvist C, Mazzanti A, et al. 2015 ESC Guidelines for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death: Task Force for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death of the European Society of Cardiology (ESC). Backed by: Association for European Pediatric and Congenital Cardiology (AEPC) Eur Heart J. 2015;36:2793â «2867. doi:Â 10.1093/eurheartj/ehv316. [PubMed] [CrossRef] [Google Scholar]176. Maron MS, Rowin EJ, Wessler BS, et al. Improved strategy of the American College of Cardiology/American Heart Association for the prevention of sudden cardiac death in high-risk patients with hypertrophic cardiomyopathy. JAMA Cardiol. 2019;4:644»657. doi:Â 10.1001/jamacardio.2019.1391. [PubMed free article] [CrossRef] [Google Scholar]177. Alba AC, Foroutan F, Duero Posada J, et al. Implantable heart defibrillator and mortality in non-ischemic cardiomyopathy: an updated meta-analysis. Heart. 2018;104:230â «236. doi:Â 10.1136/heartjnl-2017-311 430. [PubMed] [CrossRef] [Google Scholar]178. Lybeck A, Friberg H, Aneman A, et al. Prognostic importance of clinical seizures after cardiac arrest and the management of target temperature. Reanimation. 2017;114:146Ã¨151. doi:Â 10.1016/j.reanimation.2017.01.017. [PubMed] [CrossRef] [Google Scholar]179. Seder DB, Sunde K, Rubertsson S, et al. Neurological results and post-resurrection care of patients with myoclone after cardiac arrest. Crit Care Med. 2015;43:965»972. doi:Â 10.1097/CCM.0 000 000 000 880. [PubMed] [CrossRef] [Google Scholar]180. Gupta HV, Caviness JN. Post-hypoxy mioclone: current concepts, neurophysiologytreatment. Tremor other others MOV (n and) 2016; 6: 409. DOI: 10.5334 / TOHM.323. [PubMed] [CrossRef] [Google Scholar] 181. Elmer J, RTUTTSBERGER JC, FARO J, et al. Clinically distinct clinically non-myoclone electroencephalographic phenotypes early after cardiac arrest. Ann Neurol. 2016; 80: 175- 184. DOI: 10.1002 / ANA.24697. [PubMed free article] [CrossRef] [Google Scholar] 182. Lucas JM, Cocchi Mn, Salciccioli J, et al. Neurological recovery after therapeutic hypothermia in patients with post-cardiac arrest Myoclone. Resurrection. 2012; 83: 265- 269. DOI: 10.1016 / J.Resuscation.2011.09.017. [PubMed] [CrossRef] [Google Scholar] 183. Bouwes A, Van Poppelen D, Koelman JH, et al. Myoclone pósthipoxico acute after cardiopulmonary resuscitation. BMC Neurol. 2012; 12: 63. DOI: 10.1186 / 1471-2377-12-63. [PubMed's free article] [CrossRef] [Google Scholar] 184. Aicua Rapun I, Novy J, Solari D, Oddo M, Rossetti AO. Early release: Adams syndrome after a heart arrest: Prevalence, time to return to consciousness and result in a great cohort. Resurrection. 2017; 115: 169-172. DOI: 10.1016 / J.Resuscation.2017.03.020. [PubMed] [CrossRef] [Google Scholar] 185. Lance JW, Adams Rd. Myoclone intent syndrome or action as a sequel to hypoxic encephalopathy. Brain. 1963; 86: 111- 136. DOI: 10.1093 / brain / 86.1.111. [PubMed] [CrossRef] [Google Scholar] 186. Backman S, Westhall E, Dragancea I, et al. Electroencephalographic characteristics of the epileptic state after a heart arrest. Clin neurofisiol. 2017; 128: 681- 688. DOI: 10.1016 / J.Clinph.2017.01.002. [Pubmed] [CrossRef] [Google Scholar] 187. Hirsch LJ, FONG MWK, LEITYER M, et al. Standardized Critical Terminology of American Clinical Neurophysiology Society: 2021 version. J clin neurofisiol. 2021; 38: 1 - 29. DOI: 10.1097 / WNP.0000000000806. [PubMed's free article] [CrossRef] [Google Scholar] 188.M, Sakellariou D. Low frequency frequency low frequency, periodic discharge, epileptiform discharge and the boundary of hypoxic. hypoxic. Epilnel State in comatheous patients after a cardiac arrest. Behavior of epilepsy 2015; 49: 255Â »262. Doi: Ã, 10.1016 / j.ybeh.2015.04.060. [Pubmed] [Crossref] [Google Scholar] 189. Thomke F, Weilemann SL. Bad pronounced despite the successful treatment of the widespread mikoclonus. Neurología 2010; 74: 1392Â ¢ â € 1394. Doi: Ã, 10.1212 / WNL.0B013E3181G95B9. [Pubmed] [Crossref] [Google Scholar] 190. Solanki P, Coppler PJ, KVALOY JT, ET AL. Association of antiepilistic drugs with resolution of epileptiform activity after cardiac unemployment. Resuscitation. 2019; 142: 82Â »90. Doi: Ã, 10,1016 / j.reanimation.2019.07.007. [Free PMC Article] [Pubmed] [Crossref] [Google Scholar] 191. Dijk JM, MA of Tijssen. Treatment of patients with Mioclonia: available therapies and need a evidence-based approach. Lancet Neurol. 2010; 9: 1028Â »1036. Doi: Ã, 10.1016 / S1474-4422 (10) 70 193-9. [Pubmed] [Crossref] [Google Scholar] 192. Zaccara G, Giorgi FS, Amantini A, et al. By which we prefer levetiracetam on phenytoo for the treatment of epilled status. Acta Neurol Scand. 2018; 137: 618Ã «622. Doi: Ã, 10.1111 / Ane.12 928. [Pubmed] [Crossref] [Google Scholar] 193. Brain resuscitation Clinical trial I Study group Study Randomized clinical study of thiopental load in comatous cardiac arrest survivors. N Engl J Med. 1986; 314: 397Ã ¢ â € 403. DOI: Ã, 10.1056 / NEJM198 602 133 140 701. [Pubmed] [Crossref] [Google Scholar] 194. Longstreth WT, JR, CE, Olsufka M, Walsh TR, Copass MK, Cobb La. Randomized clinical essay of magnesium, diazepam or both after a cardiac arrest outside the hospital. Neurología 2002; 59: 506Â ¢ Â »514. Doi: Ã, 10.1212 / WNL.59.4.506. [Pubmed] [Crossref] [Google Scholar] 195. Ruijter BJ, Van Putten MJ, Horn J, et al. Treatment of electroencephalographic epilectic state after cardiopulmonary resuscitation: study protocol for a randomized controlled trial. Judgments 2014; 15: 433. Doi: Ã, 10.1186 / 1745-6215-15-433. [Article de Pmc] [pubmed] [crossb] [google scholar] 196. Betta s, house a, white and, et al. AL. Epilepticus result of postanoxic refractory state after aggressive treatment. Neurology. 2018; 91: E2153 â¬"E2162. DOI: 10.1212 / WNL.0 000 000 000 006 615. [PubMed] [CrossRef] [Google Scholar] 197. Dragancea I, Backman S, Westhall E, Rundgren M, Friberg H, Cronberg T. Outcome after epileptic state after posanoxic state in patients with controlled temperature management after cardiac arrest. The behaviour of epilepsy. 2015; 49: 173- 177. DOI: 10.1016 / J.YEBEH.2015.04.043. [PubMed] [CrossRef] [Google Scholar] 198. Hofmeijer J, Tjepkema-Cloostersmans MC, Blans MJ, Beishuizen A, Van Putten MJ. Non-standardized treatment of the Electroencephalographic status Epilepticus does not improve the outcome of comatose patients after cardiac arrest. Front Neurol. 2014; 5: 39. DOI: 10.3389 / FNEUR.2014.00 039. [Free PMC article] [PubMed] [CrossRef] [Google Scholar] 199. Rossetti Ao, Oddo M, Liaudet L, Kaplan PW. Predictors of awakening of the postanoxic state Epilepticus after therapeutic hypothermia. Neurology. 2009; 72: 744- 749. DOI: 10.1212 / 01.WNL.0 000 343 006.60 851.62. [PubMed] [CrossRef] [Google Scholar] 200. Crepeu AZ, FUGATE JE, Mandrekar J, et al. Value analysis of continuous EEG in patients during therapeutic hypothermia after cardiac arrest. Resurrection. 2014; 85: 785- 789. DOI: 10.1016 / J.Resusctit.2014.01.019. [PubMed] [CrossRef] [Google Scholar] 201. Sondag L, Ruijter BJ, Tjepkema-Cloostersmans MC, et al. Early EEG for the prediction of post-anoxic coma results: prospective cohort study with cost minimization analysis. Care crit. 2017; 21: 111. DOI: to 10.1186 / S13 054-017-1693-2. [Free article from PMC] [PubMed] [CrossRef] [Google Scholar] 202. Dragancea I, Horn J, Kuiper M, et al. Neurological prognosis after cardiac arrest and temperature management directed at 33 Â° C versus 36 Â° C: results of a controlled clinical trial Resurrection. 2015; 93: 164- 170. doi: â 10.1016 / J.Resusctit.2015.04.013. [pubmed] [crossref] [google scholar] 203. barbella g, lee jw, alvarez v, et al. prediction to recoverIn spite of an early Epileptiform EEG after cardiac arrest. Neurología 2020; 94: E1675â € "E1683. Doi: 10.1212 / WNL.0000000000009283. [Pubmed] [Crossref] [Google Scholar] 204. King A, Rossetti Ao, Miroz JP, Eckert P, Oddo M. Late awakening in survivors of the postanico coma: predictative neurophysiological early and association with UCI and neurological recovery in the long term. Crit Care Med. 2019; 47: 85â € "92. Doi: 10,1097 / ccm.0000000003470. [Pubmed] [Crossref] [Google Scholar] 205. Donnino MW, Andersen LW, Berg Km, et al. Tempomation of temperature after a cardiac arrest: A advisory declaration of the advanced life support task team of the International Reanimate Committee and Emergency Cardiovascular Committee of the American Heart Association and The Council on cardiopulmonary, critical care, perioperation and resuscitation. Resurrection 2016; 98: 97 â € "104. Doi: 10,1016 / j.resuscitation.2015.09.396. [Pubmed] [Crossref] [Google Scholar] 206. Donnino MW, Andersen LW, Berg Km, et al. Template management after a cardiac arrest: a consultative declaration of the Advanced Task Force Group of the Life of the International Reanage Committee and the Emergency Cardiovascular Care Committee of the American Heart Association and The Council on cardiopulmonary, critical care, perioperation and resuscitation. Circulation. 2015; 132: 2448â € "2456. Doi: 10.1161 / cir.0000000000313. [Pubmed] [Crossref] [Google Scholar] 207. Callaway CW, Soar J, Aibiki M, et al. Part 4: Support for advanced life: International Consensus of 2015 on cardiopulmonary resurrection and emergency cardiovascular care science with treatment recommendations. Circulation. 2015; 132: S84â € "145. Doi: 10.1161 / cir.0000000000273. [Pubmed] [Crossref] [Google Scholar] 208. Obermeyer Z, Samra JK, Mullainathan S. Individual differences in normal body temperature: longitudinal analysis of records of records of BMJ. 2017;359:j5468. doi: 10.1136/bmj.j5468. [PMC free article] [PubMed] [CrossRef] [Google Scholar]209. Coppler PJ, PJ, KA, Okonkwo DO, et al. Code of cerebral and central temperature in coma patients after cardiac arrest. Ther Hypothermia Temp Manag. 2016;6:194â197. doi: 10.1089/ther.2016.0010. [PMC free article] [PubMed] [CrossRef] [Google Scholar]210. Zeiner A, Holzer M, Sterz F, et al. Hyperthermia after cardiac arrest is associated with an unfavorable neurological outcome. Arch Intern Med. 2001;161:2007â2012. doi: 10.1001/archinte.161.16.2007. [PubMed] [CrossRef] [Google Scholar]211. Makker P, Kanei Y, Misra D. Clinical effect of rebound hyperthermia after cooling postcardiac arrest: a meta-analysis. Ther Hypothermia Temp Manag. 2017;7:206â209. doi: 10.1089/ther.2017.0009. [PubMed] [CrossRef] [Google Scholar]212. Picetti E, Antonini MV, Bartolini Y, et al. Delayed fever and neurological outcome after cardiac arrest: a retrospective clinical study. Neuropathic attention. 2016;24:163â171. doi: 10.1007/s12 028-016-0251-0. [PubMed] [CrossRef] [Google Scholar]213. Olai H, Thorneus G, Watson H, et al. Meta-analysis of targeted temperature management in animal models of cardiac arrest. Intensive Care Med Exp. 2020;8:3. doi: 10.1186/s40 635-019-0291-9. [PubMed] [CrossRef] [Google Scholar]214. Drury PP, Gunn ER, Bennet L, Gunn AJ. Mechanisms of hypothermal neuroprotection. Clin Perinatol. 2014;41:161â175. doi: 10.1016/j.clp.2013.10.005. [PubMed] [CrossRef] [Google Scholar]215. McCullough JN, Zhang N, Reich DL, et al. Brain metabolic suppression during hypothermal circulatory arrest in humans. Ann Thorac Surg. 1999;67:1895-1899. doi: 10.1016/S0003-4975 (99) 00 441-5. [PubMed] [CrossRef] [Google Scholar]216. Gunn AJ, Thoresen M. Neuroprotection hypothermia. NeuroRx. 2006;3:154â169. doi: 10.1016/j.nurx.2006.01.007. [PubMed] [CrossRef] [Google Scholar]217. Bro-Jeppesen J, Kjaergaard J, Wanscher M, et al. The inflammatory response after cardiac arrest outside of hospitality is not altered by temperature management directed at 33 C o 36 36 C. Resuscitation. 2014; 85: 1480â € "1487. Doi: 10,1016 / j.resuscitation.2014.08.007. [Pubmed] [Crossref] [Google Scholar] 218. Hypothermia after study of cardiac arrest G Mild therapy hypothermia to improve the neurological result after cardiac arrest. N Engl J Med. 2002; 346: 549-556. Doi: 10.1056 / nejmoa012689. [Pubmed] [Crossref] [Google Scholar] 219. Bernard SA, Gray TW, Buist Md, et al. Treatment of survivors in Cardãaco Coma out of hospital with hypothermia induced. N Engl J Med. 2002; 346: 557â € "563. Doi: 10.1056 / nejmoa003289. [Pubmed] [Crossref] [Google Scholar] 220. MADER TJ, NATHANSON BH, SOARES WE, 3, COUTE RA, MCNALLY BF. Comparative efficiency of the therapy hypothermia after a cardiac arrest outside of hospitality: vision of a large data record. Ther Hypothermia Temp Manag. 2014; 4: 21â € "31. Doi: 10.1089 / thher.2013.0018. [PMC Free Article] [PubMed] [Crossref] [Google Scholar] 221. Marion DW, Leonov and, Ginsberg M, et al. Reanimant hypothemy. Crit Care Med. 1996; 24: S81â € "89. Doi: 10,1097 / 00003246-199602000-00050. [Pubmed] [Crossref] [Google Scholar] 222. Bernard SA, Smith K, Cameron P, et al. Induction of the therapy hypothermia by paramissants after the resuscitation of ventricular fibrillation outside hospitality cardiac arrest: a randomized controlled test. Circulation. 2010; 122: 737â € "742. Doi: 10,1161 / CirculationAha.109.906859. [Pubmed] [Crossref] [Google Scholar] 223. Kim F, Nichol G, Maynard C, et al. Effect of the prehospital induction of mild hypothermia in survival and neurologic state between adults with cardiac arrest: a randomized clinical assay. JAMA 2014; 311: 45â € "52. Doi: 10.1001 / jama.2013.282173. [Pubmed] [Crossref] [Google Scholar] 224. Bernard SA, Smith K, Finn J, et al. Induction of the therapy hypothermia during the cardiac arrest outside of hospitality through a quick infusion of cold saline: the RINSE trial (infusion of cold saline) circulation. 2016; 134: 797â € "805. Doi: [PubMed] [CrossRef] [Google [Google Castren M, Nordberg P, Svensson L, et al. Intra-arrest transnase evaporative cooling: a randomized, prehospital and multicentro study (Prince: pre-ROSC intranasal cooling efficiency) circulation. 2010; 122: 729â € "736. Doi: 10,1161 / CirculationAha.109.931691. [Pubmed] [Crossref] [Google Scholar] 226. Nordberg P, Taccone FS, Truhlar A, et al. Effect of trans-nasal evaporative intra-portible cooling in the functional neurological result in cardiac arrest outside hospital: The Randomized Clinical Test Princess. JAMA 2019; 321: 1677-1685. Doi: 10.1001 / jama.2019.4149. [Pubmed] [Crossref] [Google Scholar] 227. Awad A, Taccone FS, Jonsson M, et al. Time of the intra-arrestrete therapy hypothermia in cardiac arrest patients outside the hospital and its association with the neurological result: a propensity coincides with the princess assay subanamel. Intensive care Med. 2020; 46: 1361â € "1370. Doi: 10.1007 / S00134-020-06024-3. [Pubmed] [Crossref] [Google Scholar] 228. Cronberg T, Lilja G, Horn J, et al. Neurologic function and quality of life related to health in patients following a specific temperature management of 33 ° C vs 36 Â ° C after a cardiac arrest outside of hospital: a randomized clinical assay. Jama Neurol. 2015; 72: 634-641. Doi: 10.1001 / jamaneurrol.2015.0169. [Pubmed] [Crossref] [Google Scholar] 229. Lilja G, Nielsen N, Friberg H, et al. Cognitive function in cardiac arrest survivors outside hospitality after the target temperature management at 33 ° C versus 36 ° c. Circulation. 2015; 131: 1340â € "1349. Doi: 10,1161 / CirculationAha.114.014414. [Pubmed] [Crossref] [Google Scholar] 230. Stammet P, Colignon or, Hassager C, et al. Enolasa Neuron Specific as a predictor of death or bad neurological evolution after a cardiac arrest outside of hospitality and temperature management directed at 33 ° C and 36 ° c. J Am Coll Cardiol. 2015; 65: 2104â € "2114. Doi: 10,1016 / j.jacc.2015.03.538. [Pubmed] [Crossref] [Google Moseby-scarce M, Mattsson N, Nielsen N, et al. SUERO SUERO. Light chain for pronouncement of the result after cardiac arrest. Jama Neurol. 2019; 76: 64- 71. DOI: Ã, 10.1001 / JAMANEUROL.2018.3223. [Free PMC Article] [Pubmed] [Crossref] [Google Scholar] 232. Annborn M, Bro-Jeppeesen J, Nielsen N, et al. The management association of the temperature directed to 33 and 36 ° C with the result in patients with a moderate shock in the admission after cardiac arrest outside the hospital: a posterior analysis of the temperature management test hoc objective. Intensive care Med. 2014; 40: 1210-1219. DOI: Ã, 10.1007 / S00134-014-3375-8. [Pubmed] [Crossref] [Google Scholar] 233. Lopez-de-Sa E, Juárez M, Armed E, et al. A multistical randomized pilot test on the effectiveness of the different levels of cooling in the comatose survivors of cardiac arrest outside the hospital: the FROST-I test. Intensive care Med. 2018; 44: 1807- 1815. DOI: Ã, 10.1007 / S00134-018-5256-Z. [Pubmed] [Crossref] [Google Scholar] 234. Deye N, Vincent F, Michel P, et al. Changes in the temperature management of heart attack patients after the 2013 "TTM" test: results of

arrest: impact of age and time to ROSC. Resurrection. 2019; 139: 214- 221. DOI: 10.1016 / J.Resusctit.2019.04.021. [PubMed] [CrossRef] [Google Scholar] 381. Rundgren M, CRONBERG T, FRIBERG H, Isaksson A. Serum neurone Enolase specific: the impact of the method of storage and medicine. BMC RES Notes. 2014; 7: 726. DOI: 10.1186 / 1756-0500-7-726. [PMC free article] [PubMed] [CrossRef] [Google Scholar] 382. Traductor P, Dankiewicz J, Nielsen N, et al. The S100 protein as a predictor of results after cardiac arrest outside the hospital and temperature management directed to 33 Â° C and 36 Â° C. Care crit. 2017; 21: 153. DOI: 10.1186 / S13 054-017-1729-7. [Free article by PMC] [PubMed] [CrossRef] [Google Scholar] 383. Wilson DH, Rissin DM, Kan CW, et al. The SIMOA HD-1 analyzer: a new fully automated digital immunoassay analyzer with sensitivity and multiplexing of single-molecule molecules. J Lab Autom. 2016; 21: 533-547. DOI: 10.1177 / 2 211 068 215 589 580. [PubMed] [CrossRef] [Google Scholar] 384. Wihersaari L, Ashton Reinikainen M et al (2021) Neurofilament light as predictor of results despuÃ©s de un arresto cardÃaco: un anÃ¡lisis post hoc de la prueba de comacare. Intensive care Med 47 (1): 39- 48 [ArtÃculo libre PMC] [PubMed] 385. Keijzer hm, hm, CWE, Meijer Fja, Bar Tonino, Klijn CJM, Hofmeijer J. Brain imaging in comatose survivors of cardiac arrest: pathophysiological correlates and prognostic properties. Resurrection. 2018; 133: 124- 136. DOI: 10.1016 / J.Resuscation.2018.09.012. [PubMed] [CrossRef] [Google Scholar] 386. Lee DH, Lee Bk, Jeung KW, et al. Relation between ventricular characteristics on brain computed tomography and the 6-month neurological outcome in cardiac arrest survivors who underwent targeted temperature management. Resurrection. 2018; 129: 37- 42. DOI: 10.1016 / J.Resuscation.2018.06.008. [PubMed] [CrossRef] [Google Scholar] 387. Scarpino M, Lolli F, Lanzo G, et al. Neurophysiology and neuroimaging accurately predict the poor neurological result within 24 h after cardiac arrest: the prognostic multicenter study prognosis. Resurrection. 2019; 143: 115- 123. DOI: 10.1016 / J.Resuscation.2019.07.032. [PubMed] [CrossRef] [Google Scholar] 388. Wang Gn, Chen XF, LV JR, SUN NN, XU XQ, Zhang JS. The prognostic value of the proportion of grey-white matter in brain computed tomography in survivors of adult cardiac arrest. J Chin Med Assoc. 2018; 81: 599-604. DOI: 10.1016 / J.JCMA.2018.03.003. [PubMed] [CrossRef] [Google Scholar] 389. Kim JH, Kim MJ, JS, et al. Multimodal approach for the neurological prognosis of patients with cardiac arrest outside the hospital under specific temperature management. Resurrection. 2019; 134: 33- 40. 40. DOI: 10.1016 / J.Resuscation.2018.11.007. [PubMed] [CrossRef] [Google Scholar] 390. Lee Bk, Kim Wy, Shin J, et al. Prognostic value of the grey matter to the proportion of white matter in hypoxic and non-hypoxic cardiac arrest with non-cardiac etiology. Am j Emerg Med. 2016; 34: 1583- 1588. DOI: 10.1016 / J.ajem.2016.05.063. [PubMed] [CrossRef] [Google Scholar] 391. Lee KS, Lee Se, Choi Jy, et al. Useful Score of the Computed for the estimation of the early neurologic result in patients with post-cardiac arrest with therapy hypothermia. CIRCL J. 2017; 81: 1628-1635. 1635. [Pubmed] [Crossref] [Google Scholar] 392. Oh Jh, Choi SP, Wee Jh, Park Jh. Variability between scanners in the HOUNSFIELD unit measured by TC of the brain and effect in the relationship of gray-to-white matter. AM J Emerg Med. 2019; 37: 680â € "684. Doi: 10.1016 / j.jem.2018.07.016 [PubMed] [Crossref] [Google Scholar] 393. Lee BK, Jeung KW, Song Kh, et al. Pronoratic values of gray matter to white matter relationships in computerized brain computed tomography in coma adult patients after a cardiac arrest outside of cardiac etiology hospital. Resurrection 2015; 96: 46â € "52. Doi: 10.1016 / j.resuscitation.2015.07.027 [PubMed] [Crossref] [Google Scholar] 394. Moseby-Knappe M, Pellis T, Dragancea I, et al. Computed tomography of the head for pronouncement of poor results in coma patients after cardiac arrest and the specific temperature management. Resurrection 2017; 119: 89â € "94. Doi: 10,1016 / j.resuscitation.2017.06.027 [PubMed] [Crossref] [Google Scholar] 395. Sandroni C, D'Arrigo S, Nolan JP. Prognostic after cardiac arrest. Care of the race. 2018; 22: 150. Doi: 10.1186 / S13054-018-2060-7 [PMC Free Article] [Pubmed] [Crossref] [Google Scholar] 396. Greer DM, Scripko PD, Wu O, et al. The anomalies of hippocampal magnetic resonance at the cardiac arrest are associated with the deficient outcome. J Stroke cerebrovasc dis. 2013; 22: 899â € "905. Doi: 10.1016 / j.jstrokerebrovasdis.2012.08.006 [Pubmed] [Crossref] [Google Scholar] 397. Jang J, Oh Sh, Nam and, et al. Pronostic value of the phase information of the cerebral image gradient gradient with weight 2D T2 * in cardiac arrest survivors: a preliminary study. Resurrection 2019; 140: 142â € "149. Doi: 10,1016 / j.resuscitation.2019.05.026 [PubMed] [Crossref] [Google Scholar] 398. JEON CH, PARK JS, Lee Jh, et al. Comparison of the computed tomography of the brain and magnetic resonance imaging by the diffusion to predict the neurologic result early before la gestiÃ³n de temperature objetivo sobrevivientes de paro cardÃaco en coma. ResucitaciÃ³n. 2017;118:21â26. doi: 10.1016/j.resuscitation.2017.06.021 [PubMed] [PubMed] [Google Scholar]399. Ryoo SM, Jeon SB, Sohn CH, et al. Prognosis of the result with diffusion-weighted image in patients with cardiac arrest receiving hypothermia therapy: retrospective multicenter cohort study. Crit Care Med. 2015;43:2370Â"2377. doi:Ã¶ 10.1097/CCM.0 000 000 000 000 001 263. [PubMed] [CrossRef] [Google Scholar]400. Kim J, Kim K, Hong S, et al. MRI cluster-based analysis weighted by diffusion for the prognosis of survivors of cardiac arrest outside the hospital. Resuscitation. 2013;84:1393¢ ÌÀ1399. doi:Ã¶ 10.1016/d.reanimation.2013.04.011. [PubMed] [CrossRef] [Google Scholar]401. Moon HK, Jang J, Park KN, et al. Quantitative analysis of the relative volume of low apparent value of the diffusion coefficient can predict the neurological outcome after cardiac arrest. Resuscitation. 2018;126:36Â"42. doi:Ã¶ 10.1016/j.reanimation.2018.02.020. [PubMed] [CrossRef] [Google Scholar]402. Hirsch KG, Fischbein N, Mlynash M, et al. Prognostic value of diffusion-weighted MRI for cardiac postpartum coma. Neurology. 2020;94:e1684Â"e1692. doi:e10.1212/WNL.000 000 009 289. [Free article by PMC] [PubMed] [CrossRef] [Google Scholar]403. Bongiovanni F, Romagnosis F, Barbella G, et al. Standardized analysis of the EEG to reduce the uncertainty of the outcome after cardiac arrest. Intensive Care Med. 2020;46:963â"972. doi:Ã¨ 10.1007/s00 134-019-05 921-6. [PubMed] [CrossRef] [Google Scholar]404. Hirsch LJ, LaRoche SM, Gaspard N, et al. American Clinical Neurophysiology Societyâs Standardized Critical Care EEG Terminology: 2012 version. J Clin Neurophysiol. 2013;30:1Â¢"27. doi:Ã¶ 10.1097/WNP.0b013e3 182 784 729. [PubMed] [CrossRef] [Google Scholar]405. Sharshar T, Citerio G, Andrews PJ, et al. Neurological examination of critically ill patients: a pragmatic approach. Report of an ESICM expert group. Intensive Care Med. 2014;40:484Â"495. doi:Ã¨ 10.1007/s00 134-014-3214-y. [PubMed] [CrossRef] [Google Scholar]406. Greer DM, Shemie SD, Lewis A, et al. Determination of the brainby neurological criteria: the World Brain Death Project. NEVER. 2020;324:1078â"1097. doi:Ã¶ 10.1001/jama.2020.11 586. [PubMed] [CrossRef] [Google Scholar]407. Sandroni C, Flu A, Nolan JP. ERCÃ¢ ÌÀESICM guidelines for prognosis after cardiac arrest: time for an update. Intensive Care Med. 2020;46:1901Â"1903. doi:Ã¨ 10.1007/s00 134-020-06 224-x. [PubMed] [CrossRef] [Google Scholar]408. Beuchat I, Solari D, Novy J, Oddo M, Rossetti AO. Standardized interpretation of EEG in patients after cardiac arrest: correlation with other prognostic predictors. Resuscitation. 2018;126:143â"146. doi:Ã10,1016/d.reanimation.2018.03.012. [PubMed] [CrossRef] [Google Scholar]409. Fredland A, Backman S, Westhall E. Stratification of comatose postanoxic patients for somatosensory evoked potentials using routine EEG. Resuscitation. 2019;143:17Â"21. doi:Ã¶ 10.1016/d.reanimation.2019.07.027. [PubMed] [CrossRef] [Google Scholar]410. Beuchat I, Novy J, Barbella G, Oddo M, Rossetti AO. EEG patterns associated with cortical ESSP present after cardiac arrest. Neurol Scand report. 2020;142:181â"185. doi:Ã¶ 10.1111/ane.13 264. [PubMed] [CrossRef] [Google Scholar]411. Scarpino M, Lolli F, Lanzo G, et al. (2021) Does a combination of >/=2 abnormal tests vs. the ERCÃ¢ ÌÀESICM step algorithm improve the prediction of poor neurological outcomes after cardiac arrest? Post-hoc analysis of multicenter ProNeCA. Resuscitation 160:158Â"167 [PubMed]412. Bouwes A, Binnekade JM, Kuiper MA, et al. Prognosis of coma after therapeutic hypothermia: a prospective cohort study. Ann Neurol. 2012;71:206Â"212. doi: 10.1002/ana.22 632. [PubMed] [CrossRef] [Google Scholar]413. Hakimi K, Kinney G, Kraft G, Micklesen P, Robinson L. Reliability in the interpretation of mean somatosensory potentials evoked in the coma scenario: factors and implications. Neurocriter Care. 2009;11:353Â¢Â"361. doi:Ã¶ 10.1007/s12 [PubMed] [CrossRef] [Google Scholar]414. Wijdicks EF, Hijdra A, Young GB, Bassetti CL, Wiebe S. S.parameter: prediction of result in comatose survivors after cardiopulmonary resuscitation (a evidence-based review): report of the subcommittee of quality standards of the American academy of neurology. 2006; 67: 203- 210. doi: â 10.1212 / 01.WNL.0000227183.21314.cd. [pubmed] [crossref] [google scholar] 415. oro b, gates l, davis sp, et al. wake up after a heart arrest and post-hypothermic resuscitation: Are we pulling out the plug too soon? 2014; 85: 211- 214. doi: â 10.1016 / J.Resusctit.2013.10.030. [pubmed] [crossref] [google scholar] 416. lybeck a, cronberg t, aneman a, et al. waking time after cardiac arrest and association with the management of the target temperature. 2018; 126: 166- 171. doi: â 10.1016 / J.Resuscation.2018.01.027. [pubmed] [crossref] [google scholar] 417. nakstad er, Staer-Jensen h, wimmer h, et al. arouse late, prognostic factors and long-term results in cardiac arrest outside the hospital, results of possible revival of the study 2017; 37: 81- 87. doi: â 10.1055 / S-0036-1595814. [pubmed] [crossref] [google scholar] 419. levin pd, suspected. the withdrawal and retention of life-supporting therapies are not the same. crit care. 2005; 9: 230- 232. doi: â 10.1186 / CC3487. [free article of pmc] [pubmed] [crossref] [google scholar] 420. sprung cl, woodcock t, sjokvist p, et al. reasons, considerations, difficulties and documentation of the final decisions of life in the European intensive care units: the ethical study. intensive care med. 2008; 34: 271- 277. doi: â 10.1007 / S00134-007-0927-1. [pubmed][Google Scholar] 421. Sprung CL, Ricou B, Hartog CS et al (2019) Changes in the final practical of life in the European Intensive Care Units from 1999 to 2016. JAMA 322: 1-12 [Free Article of PMC] PMC] Elmer J, Torres C, Aufderheide TP, et al. Association of the early withdrawal of vital support therapy for neurologic pronouncement perceived with mortality after cardiac unemployment. Resuscitation. 2016; 102: 127Â ¢ ì135. Doi: Ã, 10,1016 / j.reanimation.2016.01.016. [Free PMC Article] [PubMed] [Crossref] [Google Scholar] 423. May TL, Ruthazer R, Riker RR, ET AL. The early withdrawal of the vital support after resuscitation after a cardiac arrest is frequent and can cause additional deaths. Resuscitation. 2019; 139: 308Â »313. Doi: Ã, 10,1016 / j.reanimation.2019.02.031. [Free PMC] [PubMed] [Crossref] [Google Scholar] 424. Cochrane Ti. Unnecessary time pressure in the rejection of vital support therapies: fear of losing the opportunity to die. In J Bioeth. 2009; 9: 47Â »54. Doi: 10,1080 / 15 265 160 902 718 857. [Pubmed] [Crossref] [Google Scholar] 425. Kitzinger J, Kitzinger C. The Â «Window of opportunity» for death after a serious cerebral injury: family experiences. Sociol Health Iln. 2013; 35: 1095Â ¢ â € 1112. Doi: Ã, 10.1111 / 1467-9566.12 020. [Pubmed] [Crossref] [Google Scholar] 426. DALE CM, SINUFF T, MORRISON LJ, GOLAN E, SCALES DC. Understand the early decisions of withdrawing vital support therapy in cardiac arrest survivors. A qualitative investigation. Ann am Thorac Soc. 2016; 13: 1115Â »1122. Doi: Ã, 10.1513 / Annalsats.201 511-751OC. [Pubmed] [Crossref] [Google Scholar] 427. Lazaridis C. Removal of vital support treatments in a perceived devastating brain injury: the key role of uncertainty. Neurocrit Care. 2019; 30: 33 "41. Doi: Ã, 10.1007 / S12 028-018-0595-8. [Pubmed] [Crossref] [Google Scholar] 428. Downar J, Delaney JW, Hawryluck L, Kenny L. Guidelines for the withdrawal of life maintenance measures. Intensive care Med. 2016; 42: 1003Ã ¢ 1017. Doi: Ã, 10.1007 / S00 134-016-4330-7. [Pubmed] [Crossref] [Google Scholar] 429. Matthews EA, Magid-Bernstein J, Presciutti A, et al. Survival categorization and after cardiac arrest. Reanimation. 2017;114:79»82. doi:Â 10.1016/j.reanimation.2017.03.005. [PMC PMC release[PubMed] [CrossRef] [Google Scholar]430. Kim YJ, Ahn S, Sohn CH, et al. Long-term neurological results in patients after cardiac arrest outside hospital. Resuscitation. 2016;101:1â5. doi: 10.1016/d.resuscitation.2016.01.004. [PubMed] [CrossRef] [Google Scholar]431. Petzinka VN, Endisch C, Streitberger KJ, et al. Irresponsible awakening or coma after cardiac arrest, a long-term follow-up study. Resuscitation. 2018;131:121â127. doi: 10.1016/d.resuscitation.2018.07.007. [PubMed] [CrossRef] [Google Scholar]432. Phelps R, Dumas F, Maynard C, Silver J, Rea T. Class of long-term brain performance and prognosis after out-of-hospital cardiac arrest. Crit Care Med. 2013;41:1252â1257. doi: 10.1097/CCM.0b013e31 827ca975. [PubMed] [CrossRef] [Google Scholar]433. Dyson K, Brown SP, May S, et al. International variation in survival after cardiac arrest outside of hospitality: a validation study of Utstein's template. Resuscitation. 2019;138:168-181. doi: 10.1016/j.resuscitation.2019.03.018. [PubMed] [CrossRef] [Google Scholar]434. Smith K, Andrew E, Lijovic M, Nehme Z, Bernard S. Quality of life and functional outcomes 12 months after cardiac arrest out of hospital. Circulation. 2015;131:174â181. doi: 10.1161/CIRCULATIONAHA.114.011 200. [PubMed] [CrossRef] [Google Scholar]435. Green CR, Botha JA, Tiruvoipati R. Cognitive function, quality of life, and mental health in survivors of our hospital cardiac arrest: a review. Intensive Care Anaesth. 2015;43:568-576. doi: 10.1177/0 310 057X1 504 300 504. [PubMed] [CrossRef] [Google Scholar]436. Wilder Schaaf KP, Artman LK, Peberdy MA, et al. Anxiety, depression and PTSD after cardiac arrest: a systematic review of the literature. Resuscitation. 2013;84:873â877. doi: 10.1016/d.resuscitation.2012.11.021. [PubMed] [CrossRef] [Google Scholar]437. Sawyer KN. Reintegration and recovery after surviving cardiac arrest: learning the registry Reanimation. 2020;146:255–257. 2020;146:255–257.[pubmed] [crossref] [google Scholar]438. tiainen m, poutiainen e, oksanen t, et al. functional result, cognition and quality of life after a heart attack outside of hospital and therapeutic hypothermia: data from a randomized controlled trial. scand j trauma resoc emerg med. 2015;23:12. doi: 10.1186/s13049-014-0084-9. [pmc free article] [pubmed] [crossref] [google Scholar]439. Caro-Codon j, king jr, Lopez-de-Sa e, et al. long-term neurological results in patients with cardiac arrest outside of hospital treated with specific temperature management. resuscitation. 2018;133:33–39. doi: 10.1016/j.resuscitation.2018.09.015. [pubmed] [crossref] [google Scholar]440. knowdra ar, kristan j, raina k, et al. neurocognitive results after the successful resuscitation of cardiac arrest. 2015;90:67–72. doi: 10.1016/j.resuscitation.2015.02.023. [pubmed] [crossref] [google Scholar] 441. lim c, verfaellie m, schnyer d, lafleche g, alexander mp. recovery, long-term cognitive result and quality of life after a heart attack outside the hospital. j rehabil med. 2014;46:691-697. doi: 10.2340/16501977-1816. [pubmed] [crossref] [google Scholar]442. orbo m, aslaksen pm, larsby k, schafer c, tande pm, anke a. alterations in the cognitive result between 3 and 12 months in cardiac arrest survivors outside the hospital. 2016;105:92–99. doi: 10.1016/j.resuscitation.2016.05.017. [pubmed] [crossref] [google Scholar]443. steinbusch cvm, van heugten cm, rasquin smc, verbunt ja, moulaert vrm. cognitive effects and subjective cognitive complaints after the survival of the cardiac arrest: a prospective study of longitudinal cohorts. resuscitation. 2017;120:132–137. doi: 10.1016/j.resuscitation.2017.08.007. [pubmed] [crossref] [google Scholar]444. moulaert vrm, van heugten cm, gorgelspm t, wade dt, verbunt ja. Long-term result after the survival of a cardiac arrest: a prospective study of longitudinal cohorts.Neural. Neural. doi: 10.1177/1 545 968 317 697 032. [PubMed] [CrossRef] [Google Scholar]445. Lilja G, Nilsson G, Nielsen N, et al. Anxiety and depression among survivors of cardiac arrest outside hospital. Resuscitation. 2015;97:68â75. doi: 10.1016/d.resuscitation.2015.09.389. [PubMed] [CrossRef] [Google Scholar]446. Viktorisson A, Sunnerhagen KS, Johansson D, Herlitz J, Axelsson A. One-year longitudinal study of psychological distress and health self-assessment in survivors of cardiac arrest outside of hospitality. BMJ Open. 2019;9:e029 756. doi: 10.1136/bmjopen-2019-029 756. [PMC free article] [PubMed] [CrossRef] [Google Scholar]447. Presciutti A, Sobczak E, Sumner JA, et al. The impact of psychological distress on perceptions of long-term recovery in survivors of cardiac arrest. J Crit Care. 2019;50:227â233. doi: 10.1016/j.jcrc.2018.12.011. [PubMed] [CrossRef] [Google Scholar]448. Rosman L, Ford J, Whited A, et al. Compound Risk: The history of traumatic stress predicts the symptoms of post-traumatic stress disorder and severity in survivors of sudden cardiac arrest. Eur J Cardiovasc Nurs. 2016;15:372â379. doi: 10.1177/1 474 515 115 587 165. [PubMed] [CrossRef] [Google Scholar]449. Juan E, De Lucia M, Beaud V, et al. How are you feeling? Subjective perception of recovery as a reliable substitute for cognitive and functional outcome in cardiac arrest survivors. Crit Care Med. 2018;46:e286âe293. doi: 10.1097/CCM.0 000 000 002 946. [PubMed] [CrossRef] [Google Scholar]450. Lilja G, Nielsen N, Bro-Jeppesen J, et al. Return to work and participation in society after a cardiac arrest outside of hospitality. Circ Cardiovasc Qual Outcomes. 2018;11:e003 566. doi: 10.1161/CIRCOUTCOMES.117.003 566. [PubMed] [CrossRef] [Google Scholar]451. Geri G, Dumas F, Bonnetain F, et al. Preachers of long-term functional outcomes and health-related quality of life after cardiac arrest outside of hospitality. Resuscitation. doi: 10.1016/j.resuscitation.2017.01.028. [PubMed] [CrossRef] [Google Scholar]452. Bohm M, M, G, Finnbogadottir H, et al. AnÃ¡lisis detallado de la calidad de vida relacionada con la salud despuÃ©s del paro cardÃaco fuera de la hospitalidad. ResucitaciÃ³n. 2019;135:197â204. doi: 10.1016/j.resuscitation.2018.10.028. [PubMed] [CrossRef] [Google Scholar]453. Orbo M, Aslaksen PM, Larsby K, et al. Relevancia de cogniciÃ³n a la calidad de vida relacionada con la salud en sobrevivientes de buena salida de paro cardÃaco fuera de hospital. J Rehabil Med. 2015;47:860â866. doi: 10.2340/16501977-1998. [PubMed] [CrossRef] [Google Scholar]454. Tiainen M, Vaahersalo J, Skrifvars MB, Hastbacka J, Gronlund J, Pettila V. Sobrevivir el paro cardÃaco fuera de la hospitalidad: el resultado neurolÃ³gico y funcional y la calidad de vida relacionada con la salud 1 aÃ±o despuÃ©s. ResucitaciÃ³n. 2018;129:19â23. doi: 10.1016/j.resuscitation.2018.05.011. [PubMed] [CrossRef] [Google Scholar]455. Beesems SG, Wittebrood KM, de Haan RJ, Koster RW. FunciÃ³n cognitiva y calidad de vida despuÃ©s de la resucitaciÃ³n exitosa de paro cardÃaco. ResucitaciÃ³n. 2014;85:1269â1274. doi: 10.1016/j.resuscitation.2014.05.027. [PubMed] [CrossRef] [Google Scholar]456. Descatha A, Dumas F, Bougouin W, Cariou A, Geri G. Factores de trabajo asociados con el regreso al trabajo en sobrevivientes de paro cardÃaco fuera de hospital. ResucitaciÃ³n. 2018;128:170â174. doi: 10.1016/j.resuscitation.2018.05.021. [PubMed] [CrossRef] [Google Scholar]457. Kearney J, Dyson K, Andrew E, Bernard S, Smith K. Factores asociados con el regreso al trabajo entre sobrevivientes de paro cardÃaco fuera de la hospitalidad. ResucitaciÃ³n. 2020;146:203â212. doi: 10.1016/j.resuscitation.2019.09.006. [PubMed] [CrossRef] [Google Scholar]458. Kragholm K, Wissenberg M, Mortensen RN, et al. Volver a trabajar en sobrevivientes de paro cardÃaco fuera de la hospitalidad: un estudio de seguimiento basado en el Registro Nacional. CirculaciÃ³n. 2015;131:1682-1690. doi: 10.1161/CIRCULATIONAHA.114.011366. [PubMed] [CrossRef] [Google Scholar]459. Larsson IM, E, Rubertsson S, Kristofferzon ml. The quality of life related to health improves during the first 6 months afterwards arrest and treatment of hypothermia. Reanimation. 2014;85:215»220. doi:Â 10.1016/j.reanimation.2013.09.017. [PubMed] [CrossRef] [Google Scholar]460. Moulaert VR, Wachelder EM, Verbunt JA, Wade DT, van Heugten CM. Determinants of quality of life in cardiac arrest survivors. J Rehabil Med. 2010;42:553»558. doi:Â 10.2340/16 501 977-0547. [PubMed] [CrossRef] [Google Scholar] 461. Bunch TJ, White RD, Khan AH, Packer DL. Impact of age on long-term survival and quality of life after extrahospital heart failure. Crit Care Med. 2004;32:963»967. doi: 10.1097/01.CCM.0 000 119 421.73 520.B6. [PubMed] [CrossRef] [Google Scholar] 462. Viktorisson A, Sunnerhagen KS, Power U, Herlitz J, Axelsson AB. Wellness between extrahospital cardiac arrest survivors: cross-sectional retrospective study conducted in Sweden. BMJ Open. 2018;8:e021 729. doi:Â 10.1136/bmjopen-2018-021 729. [PubMed free article] [CrossRef] [Google Scholar] 463. Nehme Z, Andrew E, Bernard S, Smith K. Sexual differences in the quality of life and functional outcome of cardiac arrest survivors. Reanimation. 2019;137:21»28. doi: 10.1016/j.reanimation.2019.01.034. [PubMed] [CrossRef] [Google Scholar]464. Verberne D, Moulaert V, Verbunt J, van Heugten C. Factors that predict the quality of life and social participation after the survival of a cardiac arrest: Longitudinal prognosis cohort study. Reanimation. 2018;123:51»57. doi:Â 10.1016/j.reanimation.2017.11.069. [PubMed] [CrossRef] [Google Scholar]465. Elliott VJ, Rodgers DL, Brett SJ. Systematic review of quality of life and other patient-centred outcomes after the survival of cardiac arrest. Reanimation. 2011;82:247»256. doi:Â 10.1016/j.reanimation.2010.10.030. [PubMed] [CrossRef] [Google Scholar] 466. Haydon G, van der Riet P, Maguire J. Life quality of survivors after cardiopulmonary resuscitation: an integrated literature review.J Caring Sci. 2017;31:6Â»26. doi:Â 10.1111/scs.12 323. [PubMed] [CrossRef] [Google Scholar]467. Grasner JTH, JTH, IBM, Wnent J, Masteron S, Lilja G, Bein B, Bottiger BW, Rosell-Ortiz F, Nolan JP, Bossaert L, Perkins GD (2021) European Resuscitation Council Guidelines 2021: Epidemiology of Cardiac Arrest in Europe. Resurrection468. Schweickert WD, Pohlman MC, Pohlman Ace, et al. Early physical and occupational therapy in patients with crucial and ventilated disorders mechanically: a randomized controlled assay. Lancet 2009; 373: 1874-1882. Doi: 10.1016 / S0140-6736 (09) 60658-9. [Pubmed] [Crossref] [Google Scholar] 469. BRUMMEL NE, Girard TD, Ely Ew, et al. Feasibility and safety of early combined cognitive and physical therapy for medical patients and surgical patients with critical diseases: activity therapy and cognitive in the UCI (ACT-ICU) test. Intensive care Med. 2014; 40: 370â € "379. Doi: 10.1007 / S00134-013-3136-0. [Pubmed] [Crossref] [Google Scholar] 470. Bondyk CS, Rengel KF, Pandharipande PP, Hughes CG. In the UCI - Delirium post cardiac arrest. Curr opinion crit care. 2019; 25: 218-225. Doi: 10,1097 / MCC.0000000000615. [Pubmed] [Crossref] [Google Scholar] 471. Excellence Nifhac (2009) Rehabilitation is a frequent critical disease in adults. Clinical Guide 83. In: Editor (EDS) Book Rehabilitation Afrer Critical Illness in Adults. Clinical Guide 83. National Institute for Health and Care Excellence, City472. Boyce LW, Goossens pH, Moulert VR, Pound G, Van Heugten Cm. The cardiac arrest survivors outside of hospitality need cardiological and neurological rehabilitation! Curr opinion crit care. 2019; 25: 240â € "243. Doi: 10,1097 / MCC.0000000000609. [Pubmed] [Crossref] [Google Scholar] 473. Cronberg T, Greer DM, Lilja G, Moulart V, Swindell P, Rossetti Ao. Brain injuries after cardiac arrest: from the prognosis of patients in a coma to rehabilitation. Lancet Neurol. 2020; 19: 611â € "622. Doi: 10.1016 / S1474-4422 (20) 30117-4. [Pubmed] [Crossref] [Google Scholar] 474. Mion M, Al-Janabi F, Islam S, et al. Care after resuscitation: implementation of First first multidisciplinary follow-up program for extrahospital cardiac arrest survivors. ther hypothermia temp manag. 2020;10:53â´59. doi:Â 10.1089/ther.2018.0048. [pubmed] [crossref] [google Scholar]475. moulaert vr, van heugten cm, winkens b, et al. neurological follow-up early after cardiac arrest improves the quality of life a year: a randomized controlled trial. int j cardiol. 2015;193:8â16. doi:Â 10.1016/j.ijcard.2015.04.229. [pubmed] [crossref] [google Scholar]476. moulaert vr, goossens m, heijnders il, verbunt ja, heugten cm. neurological follow-up early after cardiac arrest is profitable: an economic evaluation based on a study. resuscitation. 2016;106:30â´36. doi:Â 10.1016/j.reanimation.2016.06.015. [pubmed] [crossref] [google Scholar]477. moulaert vr, verbunt ja, bakx wg, et al. 'Be still, and go ahead,' a new early intervention service for cardiac arrest survivors and caregivers: jotification and description of the intervention. clin rehabil. 2011;25:867»879. doi: 10Â.1177/0 269 215 511 399 937. [pc free article] [pubmed] [crossref] [google Scholar]478. moulaert vr, van haastregt jc, wade dt, van heugten cm, verbunt ja. 'Be still, and go ahead,' early neurological follow-up for cardiac arrest survivors and caregivers: a process evaluation. bmc health serv res. 2014;14:34. doi:Â 10.1186/1472-6963-14-34. [Free article of pmc] [pubmed] [crossref] [google Scholar]479. lilja g. follow-up of cardiac arrest survivors: why, how and when? a practical approach. semin neurol. 2017;37:88â93. doi:Â 10.1055/s-0036-1 593 859. [pubmed] [crossref] [google Scholar]480. Boyce lw, ph de goossen. rehabilitation after cardiac arrest: integration of neurological and cardiac rehabilitation. semin neurol. 2017;37:94â»102. doi:Â 10.1055/s-0036-1 593 860. [pubmed] [crossref] [google Scholar]481. blennow nordstrom e, lilja g, arestedt k, et al.IQCODE-CA: an informative questionnaire on the modified cognitive impairmentarrest the population. Resurrection. 2017; 118: 8 - 14. DOI: 10.1016 / J.Resusctit.2017.06.012. [PubMed] [CrossRef] [Google Scholar] 482. Van Heugten C, Rasquin S, Winkens I, Beusmans G, Verhey F. Checklist for cognitive and emotional consequences after stroke (CLCE-24): development, usability and quality of the autoinfo version. Clin Neurosurg. 2007; 109: 257-262. DOI: 10.1016 / J.Clineuro.2006.10.002. [PubMed] [CrossRef] [Google Scholar] 483. Blennow Nordstrom E, Lilja G. Evaluation of neurocognitive function after cardiac arrest. DRUCT CRIT COURT CARE. 2019; 25: 234- 239. DOI: 10.1097 / MCC.0000000000607. [PubMed] [CrossRef] [Google Scholar] 484. Nasreddine ZS, Phillips Na, Bedirian V, et al. The Montreal Cognitive Assessment, MOCA: a short detection tool for mild cognitive impairment. J am Geriatr Soc. 2005; 53: 695- 699. DOI: 10.1111 / J.1532-5415.2005.53221.x. [PubMed] [CrossRef] [Google Scholar] 485. Koller AC, RTUTTSBERGER JC, REPINE MJ, et al. Comparison of three cognitive tests in cardiac arrest survivors. Resurrection. 2017; 116: 98- 104. DOI: 10.1016 / J.Resuscation.2017.04.011. [PubMed's free article] [CrossRef] [Google Scholar] 486. Cicerone KD, Goldin and, Ganci K, et al. Evidence-based cognitive rehabilitation: Systematic literature review from 2009 to 2014. Arch Phys Med Rehabil. 2019; 100: 1515- 1533. DOI: 10.1016 / J.APMR.2019.02.011. [Pubmed] [CrossRef] [Google Scholar] 487. Snaith rp. Hospital anxiety and depression scale. Life results in health. 2003; 1: 29. DOI: 10.1186 / 1477-7525-1-29. [PubMed's free article] [CrossRef] [Google Scholar] 488. Larsson IM, Wallin E, Rubertsson S, Kristoferzon ml. The experiences of relatives during the next stay in Kin's hospital after surviving cardiac arrest and therapeutic hypothermia. EUR J Cardiovasc2013; 12: 353- 359. DOI: Ã, 10.1177 / 1474515112459618. [Pubmed] [Crossref] [Google Scholar] 489. JP Brown, Clark AM, Dalal H, Welch K, Taylor Rs (2011) Patient education in the management of from Heart disease. Cochrane Database Syst Sir NÃŠmero 12, CD008895 [Pubmed] 490. Israelsson J, Lilja G, Bremer A, Stevenson-Agrons J, Arededt K. Post Cardiac Arrest and follow-up detention in Sweden: A national web survey. BMC Lever. 2016; 15: 1. DOI: Ã, 10.1186 / S12912-016-0123-0. [Free Article of PMC] [Pubmed] [Crossref] [Google Scholar] 491. Sawyer KN, Brown F, Christensen R, Damino C, Newman Mm, Kurz MC. Surviving a cardiac arrest Soubito: a pilot study of qualitative survivors survey. THER HYPOTERMIA TEMP. 2016; 6: 76-84. DOI: Ã, 10.1089 / thher.2015.0031. [Pubmed] [Crossref] [Google Scholar] 492. Van Wijnen Hg, Rasquin SM, Van Heugten Cm, Verbunt Ha, Moulert Vr. The impact of cardiac arrest on the burden of well-being and long-term caregiver of family caregivers: a prospective cohort study. Clin rehabilitated. 2017; 31: 1267- 1275. DOI: Ã, 10.1177 / 0269215516686155. [Pubmed] [Crossref] [Google Scholar] 493. Zimmerli M, Tisljar K, Bafeletra GM, Langewitz W, Marsch S, Hunziker S. Prevalence and risk factors for Postraumatic stress disorder in the relatives of patients with cardiac unemployment outside the hospital. Resurrection 2014; 85: 801-808. DOI: Ã, 10.1016 / j.resuscitat.2014.02.022. [Pubmed] [Crossref] [Google Scholar] 494. Van't Wout Hout Hofland J, Moulert V, Van Heugten C, Varbunt J. Long-term quality of life of cardiac arrest survivors and the impact of witnessing A cardiac event of a close relative. Resurrection 2018; 128: 198, 203. Doi: Ã, 10.1016 / j.resuscit.2018.03.016. [Pubmed] [Crossref] [Google Scholar] 495. Adiguzel E, Yasar E, Kesikburun S, et al. Are the results of rehabilitation after a serious anxic brain injury different from a serious traumatic brain injury? A coincidental control study. Int J Rehabil Res. 2018; 41: 47- 51. Doi: Ã, 10.1097 / mrr.0000000000000261. [Pubmed] [Crossref] [Google Scholar] 496. Mk, Carayannopoulos AG, Burke DT, al-Adawi S. A comparison of functional results in hypoxia and traumatic brain injury: a pilot study. J Neurol Sci. 2007; 260: 95- 99. 99. [PubMed] [CrossRef] [Google Scholar]497. Fertl E, Vass K, Sterz F, Gabriel H, Auff E. Neurological rehabilitation of severely disabled cardiac arrest survivors. Part I. Post-acute hospital treatment course. Resuscitation. 2000;47:231Â"239. doi:Ã¶ 10.1016/S0300-9572 (00) 00 239-2. [PubMed] [CrossRef] [Google Scholar]498. Jolliffe L, Lannin NA, Cadilhac DA, Hoffmann T. Systematic review of clinical practice guidelines to identify recommendations for rehabilitation after stroke and other acquired brain injuries. BMJ Open. 2018;8:e018 791. doi:Ã¶ 10.1136/bmjopen-2017-018 791. [Free article by PMC] [PubMed] [CrossRef] [Google Scholar]499. Lee SY, Amatya B, Judson R, et al. Clinical practice guidelines for rehabilitation in traumatic brain injuries: a critical evaluation. Brain Inj. 2019;33:1263â"1271. doi:Ã¶ 10.1080/02 699 052.2019.1 641 747. [PubMed] [CrossRef] [Google Scholar]500. Winstein CJ, Stein J, Arena R, et al. Guidelines for Adult Stroke Rehabilitation and Recovery: A Guide for Health Professionals from the American Heart Association/American Stroke Association. Stroke. 2016;47:e98â"e169. doi:e10.1161/STR.0 000 000 000 000 098. [PubMed] [CrossRef] [Google Scholar]501. Needham DM, Davidson J, Cohen H, et al. Improving long-term outcomes after discharge from the intensive care unit: report from a stakeholder conference. Crit Care Med. 2012;40:502â"509. doi:Ã¶ 10.1097/CCM.0b013e318 232da75. [PubMed] [CrossRef] [Google Scholar]502. Mehlhorn J, Freytag A, Schmidt K, et al. Rehabilitation interventions for post-intensive care syndrome: a systematic review. Crit Care Med. 2014;42:1263â"1271. doi:Ã¶ 10.1097/CCM.0 000 000 000 148. [PubMed] [CrossRef] [Google Scholar]503. Wals

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