Medicina Intensiva 46 (2022) 481–484

medicina intensiva

http://www.medintensiva.org/en/

LETTER TO THE EDITOR

Should we abandon target temperature management at 33°C in post cardiac arrest patients?☆

¿Debemos abandonar el control estricto de la temperatura a 33 °C, en el manejo del paciente posparada cardiaca?

One therapeutic intervention that, over the last decade, has generated many discrepancies and controversies regarding the management of post-cardiac arrest patients is targeted temperature management (TTM).

Currently, there is no specific recommendation on the level of temperature.[1,2] To give skeptics more reasons to remain skeptical, and feed the undecided, the long-awaited TTM2 clinical trial has recently been published to add fuel to the file.[3] Prematurely and not very much pondered unfavorable opinions have appeared regarding the results of this study to the point that TTM has been declared dead for the management of post-cardiac arrest syndrome. In the study results no significant differences were found regarding mortality or improved neurological prognosis at 6 months in patients managed with TTM at 91.4°F vs 96.8°F.[3]

We'll now try to expose some of the reasons why we should not overlook the TTM2 results just like that.

Regarding other results reported, there is a huge number of patients who were resuscitated by witnesses (80%), which is well above the rates reported in previous trials and observational studies. On the other hand, a high percentage of patients had defibrilable rhythm (74%), and a relatively low percentage of patients were in shock (29%),[3] which means that the characteristics of patients from the trial population have been less serious compared to those assessed in other studies, which may have impacted findings significantly.

Scientific evidence indicates that most severe patients (PCAC 3-4), categorized as such based on the Pittsburg Cardiac Arrest Category (PCAC) scale benefited from TTM to 91.4°F vs 96.8°F in terms of survival and neurological prognosis at hospital discharge.[4] Also, the same study said that less serious patients (PCAC 2) benefited from TTM at 96.8°F. This supports an approach oriented to the personalized management of the therapy, which to this date has not been assessed in any trial, which by the way, is something that should be considered in future studies.

The controversial results from the studies published to this date have made many centers have to change their routine clinical practice regarding the temperature targets of post-cardiac arrest patients from 91.4°F to 96.8°F, which has resulted in a tendency towards clinical worsening and poor prognosis.[5]

Scientific evidence is often poorly translated into the routine clinical practice or else its results are poorly interpreted, which leads to possible risks for the patient and worse clinical outcomes. In the future, we should set our sights on individualized medicine and identify subgroups of patients who may benefit from specific target temperature management. We should not abandon therapies when biological plausibility, great cumulative evidence in animal models, and clinical trials with positive harmless results have been reported.

Funding

This work received no public or private funding whatsoever.

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☆ Please cite this article as: Blandino Ortiz A, Higuera Lucas J, Márquez Alonso JA, de Pablo R. ¿Debemos abandonar el control estricto de la temperatura a 33 °C, en el manejo del paciente posparada cardiaca? Med Intensiva. 2022;46:481–482.

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Post-COVID-19 syndrome: A call for continuity of multidisciplinary care

Síndrome post-COVID-19: Un llamado a la continuidad de la atención multidisciplinary

Dear Editor,

The pandemic caused by the new SARS-CoV2 was responsible for the death of more than 579,010 Brazilians and 4,470,969 people worldwide until August 28, 2021, despite the lack of adequate reporting of deaths in some countries. Additionally, thousands of people died without confirmed diagnosis of COVID-19, and part of the population still feels discouraged to seek hospital treatment due to precarious health care conditions and reduced access.[1] Besides impacts caused by mortality, the period of hospitalization due to the disease and complications four to twelve weeks (on average) after infection led to thousands of individuals with physical, functional, emotional, and cognitive impairments. This condition is called post-COVID-19 syndrome, persistent post-COVID-19 syndrome (PPCS), or long COVID.[2,3]

This syndrome represents a grey area of scientific knowledge regarding COVID-19. If, on the one hand, attention is given to prevention and elimination of the disease, on the other hand, thousands of people face its sequelae after overcoming the infectious phase. These people must also adapt to a ''new health condition'', which may aggravate underlying chronic diseases.[2,3]

In this scenario, the World Health Organization created a guideline on how cities should include strategies for rehabilitation of these patients in the national emergency health planning for COVID-19. Thus, this letter to the editor aims to alert the scientific community, health managers, and society about the need for early screening and continuity of multidisciplinary care in post-COVID-19 syndrome, especially in patients with high risk factors for developing long COVID, such as those who required hospitalization.[4]

Although hospital discharge is a reason to celebrate, few services provide de-hospitalization or guidance regarding next steps and further health care. This generates a false expectation that everything has been overcome. To date, more than 50 different types of post-COVID-19 sequelae were already confirmed, despite mortality due to these sequelae when patients are not well managed or treated.[3]

Below, we propose an initial model to maintain a line of multidisciplinary care based on previous studies[3–5]:

1. Identify patients with higher risk factors for developing post-COVID-19 syndrome. Priority should be directed to patients who were hospitalized in intensive care units or had prolonged hospital length of stay;
2. Clinical, functional, nutritional, and psychological check-up before hospital discharge, guidance for reassessment within the first 30 days after discharge, and periodic reassessments at least in the first year;
3. Create public and private reference services for rehabilitation of these patients (whether individual or group face-to-face care), home care, or teleconsultation/telerehabiliation, and refer patients to these locations at hospital discharge;
4. Implement screening and treatment for all levels of health care.

Continuity of care, especially rehabilitation, is essential and urgent for individuals with post-COVID-19 syndrome. In the same way that an international task force rapidly searched for disease prevention, the time has come to join efforts to mitigate sequelae and restore functionality and quality of life of those affected.

Authors' contributions

Conceptualization, methodology, formal analysis, writing-review: Bárbara R.A.F Barros-Leite and Lívia Barboza de Andrade. All authors have read and agreed to the published version of the manuscript.

Funding

Funding agencies did not finance this study.

Conflicts of interest

The authors declare no conflict of interest.

Acknowledgments

We thank patients and their families, the professionals at the IMIP Rehabilitation Center, and all the teams at the Recife Provisional Hospital 2, Recife, Brazil.