

2nd International Conference on

EMERGENCY MEDICINE AND CRITICAL CARE

October 02, 2020 | Virtual Conference

Therapeutic Hypothermia: Past, Present and Future

Santiago Herrero

The Jilin Heart Hospital, China

Therapeutic hypothermia (TH) has gained popularity in recent years for its use in a variety of clinical situations and is currently one of the main research fields. Mild TH is the process of lowering the central body temperature between 32-34 °C in those patients with acute brain injury, such as those who survive cardiac arrest but remain in a comatose state.

Among the potential indications: near drowning, traumatic cardiac injury, rhythms other than VF (asystole, complete heart block or pulseless ventricular tachycardia), stroke, central nervous system infections, hepatic encephalopathy, status epilepticus, heart failure and the adult respiratory distress syndrome have been suggested.

The historical development of TH dates back millennia; however, its use in modern clinical medicine has been documented for the last 200 years. TH was introduced in the 1950s as a protective measure for the brain and has been used routinely in the operating room to provide prolonged neuro-anesthesia. Professor Peter Safar, in the early 1960's, recommended TH as an important part of the assistance after cardiac resuscitation.

However, it was not until 2002 when two randomized, controlled, clinical trials documented a significant improvement in survival without neurological damage with TH as compared with normothermia in patients with out of hospital cardiac arrest and coma.

The future is open, there are different methods and devices available to induce systemic HT, however, in the last decade, other possibilities, including brain cooling without reducing core body temperature (selective cerebral hypothermia), have evolved to minimize possible adverse effects.

Biography:

Santiago Herrero is Clinical Director of Postoperative Cardiac ICU at The Jilin Heart Hospital, Changchun, Jilin Province, China. Board-certified critical care physician of the Spanish Society of Critical Care Medicine since 1989. He has received your Research Proficiency by the University of Oviedo (2008). Fellow of the American College of Chest Physicians since 2004. He has more than 110 articles published, several chapters in different books and the last two editions (4th and 5th , Varon J, Herrero S. Appendix: Civetta, Taylor, & Kirby's Critical Care. 2008- 2018,Lippincott-Raven). Awarded with The Mountain Changbai Friendship Award by the Jilin Government, China