Temperature Management During Heart Surgery


Current strategies for temperature management include cooling the blood, temperature maintenance and rewarming of the patient’s body temperature during cardiac surgical procedures but there is still a lack of evidence-based recommendations.

These new guidelines from the three societies were designed by a team of experts in cardiac surgery, anaesthesiology, perfusion, and epidemiology across the United States and Australia. Evidence from literature involving coronary artery bypass grafting and heart valve surgical procedures was used to create the guidelines. The task force reviewed 3,321 abstracts and 935 complete articles to gather relevant and scientifically sound evidence. The new recommendations include:

- The optimal site for temperature recording;
- Avoidance of hyperthermia (overwarming);
- Peak cooling temperature gradient and cooling rate; and
- Peak warming temperature gradient and rewarming rate.

“Our new guidelines will help improve understanding of the relationship between temperature management and clinical outcomes, particularly its impact on brain function,” said Richard Engelman, MD, from Baystate Medical Center in Springfield, Mass. “The guidelines also will increase patient awareness about the issue and help begin a dialogue between the patient and the cardiothoracic surgical team prior to surgery.”

Source: Society of Thoracic Surgery

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