Why is active prewarming important?

Active prewarming using forced air is most effective in preventing unintended hypothermia during the perioperative period.1

“Research supports that preoperative forced-air warming can limit the redistribution of body heat that occurs after the induction of anesthesia.” 2

What is active prewarming?

<table>
<thead>
<tr>
<th>Active vs. Passive Warming</th>
<th>Active</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adding heat to the body surface using a warming system such as forced-air warming to increase mean body temperature.</td>
<td></td>
<td>A method used to prevent heat loss such as warm cotton blankets, drapes, plastics, etc.</td>
</tr>
</tbody>
</table>

Active warming can be achieved by using a forced air warming device, for example, as opposed to passive warming which is done by using warm cotton blankets. Studies have shown that passive warming is simply not as effective in preventing unintended hypothermia during surgery and post operatively. 4,5,6

“It is important to maintain normothermia by active methods throughout the perioperative period, including prewarming patients to avoid an initial drop in body temperature.” 7

What the guidelines say:

American Society of PeriAnesthesia Nurses (ASPAN) 2016:

“Consider preoperative warming to reduce the risk of intra/postoperative hypothermia. Evidence suggests prewarming for a minimum of 30 minutes may reduce the risk of subsequent hypothermia.”8

Association of periOperative Registered Nurses (AORN) 2016*:

“The majority of the evidence establishes the benefit of preoperative patient warming.”9

American College of Surgeons (ACS)**:

“The use of preoperative warming prior to short, clean cases has been shown to reduce SSI and is recommended. For longer cases, both preoperative warming and ongoing temperature monitoring and warming measures are recommended.”11

Society for Healthcare Epidemiology of America/Infectious Diseases Society of America (SHEA/IDSA) Practice Recommendation:

“Randomized controlled trials have shown the benefits of both preoperative and intraoperative warming to reduce SSI rates and to reduce intraoperative blood loss.”10

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Best Practices in Active Prewarming: A Summary of Current Guidelines/Recommendations

References:


