



SUMMARY: ERAS Expert Recommendations for Cardiac Surgery

Includes Class of Recommendation (COR) and Level of Evidence (LOE)

COR	LOE	Recommendations
I	A	Tranexamic acid or epsilon aminocaproic acid is recommended during on-pump cardiac surgical procedures.
I	B-R	Perioperative glycemic control is recommended.
I	B-R	A care bundle of evidenced based best practices is recommended to reduce surgical site infections.
I	B-R	Goal directed fluid therapy is recommended to reduce postoperative complications.
I	B-NR	A multimodal, opioid-sparing, pain management plan is recommended postoperatively.
I	B-NR	Persistent hypothermia after CPB should be avoided in the early postoperative period.
I	B-NR	Maintenance of chest tube patency is recommended to prevent retained blood.
I	B-NR	Postoperative systematic delirium screening is recommended at least once per nursing shift.

I	C-LD	Smoking and hazardous alcohol consumption should be stopped 4 weeks before elective surgery.
IIa	B-R	Early detection of kidney stress and interventions to avoid acute kidney injury are recommended following surgery.
IIa	B-R	Rigid sternal fixation can be useful to improve/accelerate sternal healing and reduce mediastinal wound complications.
IIa	B-NR	Prehabilitation is recommended for patients undergoing elective surgery with multiple comorbidities or significant deconditioning.
IIa	B-NR	An insulin infusion is recommended to treat hyperglycemia in all patients postoperatively.
IIa	B-NR	Strategies to ensure extubation within 6 hours of surgery are recommended.
IIa	C-LD	Patient engagement tools, including online/application-based systems to promote education, compliance, and patient-reported outcomes are recommended.
IIa	C-LD	Chemical thromboprophylaxis is recommended following surgery.
IIa	C-LD	Preoperative measurement of hemoglobin A1c is recommended to assist with risk stratification.

Ila	C-LD	Preoperative correction of nutritional deficiency is recommended when feasible.
Ilb	C-LD	Clear liquids may be continued up until 2-4 hours before general anesthesia.
Ilb	C-LD	Preoperative carbohydrate loading may be considered before surgery.
III (No Benefit)	A	Stripping or breaking the sterile field of chest tubes to remove clot is not recommended.
III (Harm)	B-R	Hyperthermia (>37.9 C) while rewarming on cardiopulmonary bypass is potentially harmful and should be avoided.

Class of Recommendation (COR)

Class (Strength) of Recommendation	Class I (Strong)
Class (Strength) of Recommendation	Class IIa (Moderate)
Class (Strength) of Recommendation	Class IIb (Weak)
Class (Strength) of Recommendation	Class III: No Benefit (Moderate)
Class (Strength) of Recommendation	Class III: Harm (Strong)

Level of Evidence (LOE)

Level (Quality) of Evidence	Level A
Level (Quality) of Evidence	Level B-R (Randomized)
Level (Quality) of Evidence	Level B-NR (Non-randomized)
Level (Quality) of Evidence	Level C-LD (Limited Data)
Level (Quality) of Evidence	Level C-EO (Expert Opinion)

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