ERAS®
CARDIAC

Chemical thromboprophylaxis is recommended following surgery.

Class (Strength) of Recommendation	Class IIa (Moderate)
Level (Quality) of Evidence	Level C-LD (Limited Data)

Main Points

- Vascular Thrombotic Events (VTE) include both deep venous thrombosis (DVT) and pulmonary embolism (PE) and are a major potentially preventable form of morbidity and mortality for patients recovering from surgery.

- Some studies have documented an incidence of DVT following cardiac surgery as high as 15-20%.

- A recent meta-analysis suggested that VTE prophylaxis could significantly reduce the risk of VTE without increasing the risk of bleeding and cardiac tamponade, however the strength of this recommendation was limited by the low quality of the studies included.

- In this context of sparse data, we suggest the use of pharmacological prophylaxis as soon as satisfactory hemostasis has been achieved, in addition to mechanical measures such as intermittent pneumatic compression devices.

Key References

1. Ho KM, Bham E, Pavey W. Incidence of Venous Thromboembolism and Benefits and Risks of Thromboprophylaxis After Cardiac Surgery: A Systematic Review and Meta-Analysis. Journal of the American Heart Association. 2015;4:e002652.

2. Aziz F, Patel M, Ortenzi G, Reed AB. Incidence of Postoperative Deep Venous Thrombosis Is Higher among Cardiac and Vascular Surgery Patients as Compared with General Surgery Patients. Annals of vascular surgery. 2015;29:661-669.

3. Shammas NW. Pulmonary embolus after coronary artery bypass surgery: a review of the literature. Clinical cardiology. 2000;23:637-644.

4. Dunning J, Versteegh M, Fabbri A, et al. Guideline on antiplatelet and anticoagulation management in cardiac surgery. European journal of cardio-thoracic surgery : official journal of the European Association for Cardio-thoracic Surgery. 2008;34:73-92.

5. Ahmed AB, Koster A, Lance M, Faraoni D, Force EVGT. European guidelines on perioperative venous thromboembolism prophylaxis: Cardiovascular and thoracic surgery. European journal of anaesthesiology. 2018;35:84-89.