SOGC Guideline No. 417: Prevention of Venous Thromboembolic Disease in Gynaecological Surgery

Published: April 17, 2021

DOI:https://doi.org/10.1016/j.jogc.2021.04.003

RECOMMENDATIONS (GRADE ratings in parentheses)

- 1 The risk of venous thromboembolism should be considered pre-operatively and a standard approach to prophylaxis should be encouraged through standardized order sets where available (*strong, moderate*). A team approach is encouraged in difficult cases.
- 2 Patients should be counselled about the risk of venous thromboembolism and informed discharge should include discussion of the signs and symptoms of venous thromboembolism along with the recommended course of action should these occur (*strong, moderate*).
- 3 Patients should be encouraged to ambulate as soon as possible (within the first 24 h) after surgery in order to decrease the risk of venous thromboembolism (*strong, moderate*).
- 4 Intermittent compression stockings, when available, are preferred to graduated compression stockings (*strong, moderate*).
- 5 Either low-molecular-weight heparin or low-dose unfractionated heparin is recommended as the first choice for pharmacological thromboprophylaxis in most cases (*strong, high*).
- 6 For patients undergoing gynaecological surgery for benign disease, postoperative low-dose unfractionated heparin should be administered every 12 hours (twice daily) (*strong, moderate*). For patients undergoing gynaecological surgery for malignant disease, postoperative low-dose unfractionated should be administered every 8 hours (3 times a day) (*strong, moderate*).
- 7 If patients with renal dysfunction require pharmacological thromboprophylaxis, low-dose unfractionated heparin is recommended (*strong, high*). The use of low-molecular-weight heparin or fondaparinux is not recommended when creatinine clearance is <30 mL/min (*strong, high*).
- 8 For patients at high risk for venous thromboembolism and using low-molecular-weight heparin or low-dose unfractionated heparin for thromboprophylaxis, continued dosing for 4 weeks postoperatively is recommended (*strong, moderate*).
- 9 In general, patients already on low-dose aspirin for primary or secondary cardiovascular prevention should discontinue it 5–7 days prior to surgery, and restart once hemostasis is guaranteed. Patients on antiplatelet therapy with recent cardiac stenting, coronary artery bypass graft, or other significant cardiovascular disease may continue these agents after consulting with the appropriate specialist for operative planning (*strong, low*).
- 10 Thromboprophylaxis should be implemented based on the pre-operative risk assessment as described in this guideline. For most patients, mechanical

prophylaxis is recommended with or without pharmacotherapy based on risks and anticipated benefits (*strong, moderate*).

- 11 When patients are both at high risk of venous thromboembolism and at high risk for major bleeding complications, a team approach including consultation with the department of medicine is recommended (*strong, moderate*). There may be benefits to combining intermittent pneumatic compression and graduated compression stockings in this population (*conditional, low*).
- 12 For patients at high risk of venous thromboembolism and with contraindication to heparins, the use of fondaparinux and mechanical prophylaxis can be used (*strong, moderate*). Increased surveillance for bleeding complications is recommended when fondaparinux is used for thromboprophylaxis (*strong, moderate*).
- 13 Awareness of the risk of venous thromboembolism should be extended to pediatric and adolescent patients and a team approach to venous thromboembolism prophylaxis, involving a pediatrician and/or pediatric hematologist, is recommended for patients at high risk (*strong, low*).
- 14 Dose adjustment of pharmacologic thromboprophylaxis is recommended for patients with a BMI >40 kg/m^2 (*strong, moderate*).
- 15 There is no indication for stopping hormone replacement therapy preoperatively, and it is not necessary to stop oral contraceptives preoperatively in patients who are at low risk for venous thromboembolism (*strong, moderate*).
- 16 Preoperative consultation with anesthesia is recommended when pharmacologic thromboprophylaxis is indicated and regional anesthesia is being considered (*strong, very low*).