

XXVIII IFSO World Congress

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Efficacy and safety of direct oral anticoagulants (DOACs) for postoperative thromboprophylaxis in patients after bariatric surgery: a systematic review and meta-analysis

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Disclosures



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No, nothing to disclose



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Introduction and Methods

- Bariatric surgery and obesity raises the risk of thromboembolic events.
- High BMI x LMWH (enoxaparin) → higher risk of supratherapeutic dosing;
- DOACs have promising results (atrial fibrillation, thrombotic events, cancer-associated venous thrombosis)
- Some DOACs are reversible;
- Recent meta-analyses → superiority of DOACs over enoxaparin in other high-risk surgeries, such as hip and knee arthroplasties

- Systematic review and meta-analysis according to PRISMA guidelines (PROSPERO, CRD42024614087)



Results



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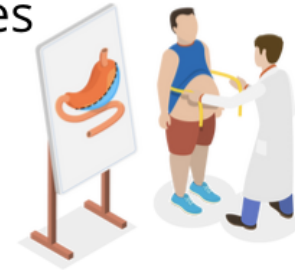
- Thrombotic events: 0.23% of 7706 patients (95% CI: .14–.39), ($I^2 = 0\%$)
Subgroup analysis by medication: 0.14% (95% CI: .04–.55) for apixaban and 0.42% (95% CI: .17–1.05) for rivaroxaban
 - Bleeding events:
 - **Major bleeding** events: 0.33% (95% CI: .11–1.03) - Rivaroxaban subgroup: 0.74% (95% CI: .25–2.16) X Apixaban subgroup: 0.07% (95% CI: .02–.25)
 - **Minor bleeding**: 1.27% of patients (95% CI: .45–3.54)
- *Variability in data presentation across studies presents a significant challenge, especially regarding the definitions and classifications of bleeding events
- **There was no direct comparison with enoxaparin

Summary

Efficacy and safety of direct oral anticoagulants (DOACs) for postoperative thromboprophylaxis in patients after bariatric surgery: a systematic review and meta-analysis



7706 patients in 7 studies
DOACs in
bariatric surgery



Low rates of adverse effects such as thrombotic events, bleeding and deaths



Limitations: Variability in data presentation across studies (definitions and classifications of bleeding events; surgical techniques such as sleeve gastrectomy and RYGB); prophylaxis protocols - duration and dosage- limits the generalizability of the findings



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