Anticoagulation part 2. Venous thromboembolism (VTE) briefing

This briefing reviews the choice of anticoagulation in venous thromboembolism (VTE) in line with the National Institute for Heath and Care Excellence (NICE) guidance [NG158].[1]

Key recommendations

- There is no strong evidence to support the use of DOACs for VTE for primary prevention (compared with low-molecular-weight heparin (LMWH)), acute treatment (compared with warfarin) and secondary prevention (compared with warfarin and aspirin). However, in terms of safety, apixaban (5mg twice daily) and rivaroxaban (15mg twice daily, then 20mg daily) may reduce the risk of major and clinically relevant bleeding, compared with warfarin, for acute and secondary treatment and for secondary prevention of VTE.[2]
- NICE guideline 158 states to offer either apixaban or rivaroxaban to people with confirmed proximal deep vein thrombosis (DVT) or pulmonary embolism (PE). If neither apixaban nor rivaroxaban is suitable, offer:
  - LMWH for at least five days followed by dabigatran or edoxaban or
  - LMWH concurrently with a vitamin K antagonist (VKA, e.g. warfarin) for at least five days, or until the INR is at least 2.0 in two consecutive readings, followed by a VKA on its own.[1]
- Prescribe DOACs generically to ensure that generic savings are made when generic versions become available.
- For people who decline continued anticoagulation treatment, NICE recommends to consider aspirin 75mg or 150mg daily (which is an off label use).
- NG158 states to consider stopping anticoagulation treatment three months after a provoked DVT or PE, if the provoking factor is no longer present and the clinical course has been uncomplicated. Consider stopping anticoagulation three to six months after active cancer.[1]
- Take into account information that may help predict risk of recurrence and risk of bleeding in the individual patient. Consider comorbidities, contraindications, and the patient's preferences. When starting treatment, carry out baseline blood tests (including full blood count, renal and hepatic function, prothrombin time and activated partial thromboplastin time).[1] See attachment 8: Table of anticoagulant comparisons.
- Ensure that DOACs are stopped after the documented or licensed treatment period is reached for prevention of VTE after major elective orthopaedic surgery (i.e. knee or hip replacement).[1] Refer to attachment 8: Table of anticoagulant comparisons.
- Review and, if appropriate, optimise prescribing and local policies relating to anticoagulants, including DOACs, to ensure these are in line with NG158.

Costs and savings

In England, Wales and Scotland £845 million is spent annually on DOACs, warfarin and phenindione (excluding monitoring) (NHSBSA Dec21-Feb22, and Public Health Scotland Nov21-Jan22).

Savings on DOACs may be achieved through a number of medicine optimisation initiatives such as deprescribing DOACs at the end of recommended treatment duration intervals, prescribing generically to ensure savings are made when less costly generic versions become available, switching to lower cost DOACs and dose optimisation as DOACs are flat dose priced across strengths.

A 10% reduction in the spend on DOACs could release annual savings of £76.8million in England and Wales and £6.8million in Scotland (NHSBSA Dec21-Feb22, and Public Health Scotland Nov21-Jan22) **In England and Wales, this equates to £118,484 per 100,00 population. In Scotland, this equates to £116,529 per 100,000 population.**

References

1. NICE. Venous thromboembolic diseases: diagnosis, management and thrombophilia testing. NICE guideline [NG158]. Published March 2020. https://www.nice.org.uk/guidance/ng158
2. Department of Health and Social Care Reviews Facility. The effective, safe and appropriate use of anticoagulation medicines. May 2018 http://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/FINAL%20REPORT%20OAC%20update.pdf?ver=2018-07-30-102531-290

Additional resources available	Briefing	https://www.prescqipp.info/our-resources/bulletins/bulletin-282-anticoagulation/
	Implementation tools	
	Data pack	https://data.prescqipp.info/views/B282_Anticoagulation/FrontPage?%3Aembed=y&%3Aiid=1&%3AisGuestRedirectFromVizportal=y

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