

Anticoagulation In Palliative And End Of Life Care: Results Of A Supra-Regional Audit And Literature Review

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INTRODUCTION

Although the evidence for anticoagulants use for both prevention and treatment of venous thromboembolism (VTE) is abundant, there remains limited evidence for the use of anticoagulation in the palliative care setting.

As part of Pallaborative North West, a guideline development group (GDG) of healthcare professionals (HCPs) in both palliative care and haematology met bi-monthly for 12 months, conducting both a comprehensive literature review and supra-regional audit.

The results of both the audit and literature review have contributed to the development of updated NICE accredited regional guidelines on the use of anticoagulation in palliative and end of life care.

AIM

Pallaborative North West is a palliative care network in the North West of England, whose scope includes writing evidence-based regional guidelines to improve the quality of care for people with life-limiting illness.

The aim of our audit and literature review was to collate the evidence available within a guideline, so that palliative care clinicians could use the best available evidence for management of patients receiving palliative and end of life care.

We therefore looked at the evidence available for anticoagulant use both for prophylaxis and treatment as well as in a number of specific clinical situations. Our final question for our literature review was to assess the evidence available around withdrawal of anticoagulation at end of life.

METHOD

A literature search was performed in with the aim of answering the following questions:

What is the evidence...

- for use of anticoagulants as treatment for VTE
- to choose one anticoagulant over another to treat VTE
- for the use of anticoagulants as prophylaxis against VTE
- to choose one anticoagulant over another for prophylaxis against VTE
- to guide withdrawing anticoagulation (either treatment or prophylaxis)

...in adults with life limiting conditions?

Supra-regional audits were performed using online surveys, including a case note review and a HCP questionnaire to determine knowledge and confidence with the use of anticoagulation in different clinical scenarios.

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RESULTS

Literature review

Of the 32 studies included for the guideline writing process, there were 11 RCTs and 8 articles specific to palliative care. Almost all (10/11) of the RCTs were specific to cancer-associated thrombosis, and all would likely have excluded patients receiving end of life care due to exclusion criteria (life expectancy less than three or six months and ECOG performance status >2). The palliative care specific studies included those documenting quality of life in patients with VTE and patients with brain tumours on anticoagulation.

VTE prophylaxis

1. Cochrane review - primary prophylaxis for VTE in ambulatory cancer patients receiving chemotherapy
 - Significantly reduced VTE rate in those having LMWH, but increased major bleeding (not statistically significant)
2. CASSINI trial - Rivaroxaban for thromboprophylaxis in high risk ambulatory patients with cancer
 - No significant reduction in VTE events in rivaroxaban arm
3. AVERT trial: apixaban to prevent venous thromboembolism in patients with cancer
 - Lower VTE rate in intermediate/high risk patients, but higher major bleeding rate

VTE treatment

1. Select-D trial (dalteparin vs rivaroxaban)
 - Cumulative recurrence rate lower with rivaroxaban, but higher cumulative bleeding rate
2. Hokusai cancer (LMWH vs edoxaban in patients with cancer-associated thrombosis)
 - Composite end point: recurrent VTE and major bleeding - edoxaban non-inferior

End of life care

1. RHESO study: Bleeding risk of terminally ill patients hospitalized in palliative care units
 - 9% bleeding rate, DVT in 0.5%
2. What Impact Does Venous Thromboembolism and Bleeding Have on Cancer Patients' Quality of Life?
 - Bleeding events had smaller impact on QoL compared to recurrent thrombotic event

Audit

For the case note audit, data for 189 patients receiving anticoagulation (either prophylactic or therapeutic) was collected from 12 sites within the region. Of these, 70% of patients were in a hospice, 23% were hospital inpatients and 7% were in the community. 42 patients died during the audited episode of care. In this group, anticoagulation was continued until within 48 hours of death in 60%, with 43% of patients continuing anticoagulation until death. However, from the healthcare professional survey, 69% of clinicians responded as feeling mostly or fully confident with knowing when to withdraw anticoagulation in patients with a life-limiting illness.

CONCLUSIONS

Although the management of CAT is a rapidly developing field, the evidence for the management of both VTE and anticoagulation in patients at the end of life remains limited. Currently, patients with VTE and those on anticoagulation are managed on an individual basis when they reach the last days or hours of life. However, the results from our audit highlight that further research in this field would be helpful to support these often complex decisions.

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