Non-adherence to thromboprophylaxis guidelines in atrial fibrillation: A narrative review of the extent and factors for guideline non-adherence

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Background Atrial fibrillation increases the risk of thromboembolism by up to fivefold. Guidelines provide evidence-based recommendations to effectively mitigate thromboembolic events using oral anticoagulants (OACs) while minimizing the risk of bleeding.
Purpose This review seeks to determine the extent of non-adherence to thromboprophylaxis guidelines in AF and factors associated with guideline non-adherence. To ensure that this review is applicable to contemporary clinical practice, we focused on studies published in the past 5 years.
Method This narrative review is based on a keyword search conducted in the PubMed and Cumulative Index of Nursing and Allied Health Literature Plus databases. Studies that assessed non-adherence to one or more thromboprophylaxis guidelines, and studies that reported factors associated with guideline non-adherence, were included. Both qualitative and quantitative studies published in English since 2015 were included.
Findings Non-adherence to guideline recommendations was highly variable in different geographic locations and healthcare settings and was observed in 4.4% to 95.2% of patients in the studies included in this review. The proportion of patients undertreated ranged from 2.5% to 76.3%. Undertreatment in high-risk patients ranged from as low as 19.7% to as high as 95.2%, with the majority of the studies reporting undertreatment between 40% and 50%. Multiple factors have been associated with non-adherence to guideline recommendations and prescription of OACs. The most common factors can be categorized as patient-related or physician-related. Patient-related factors include patient or family refusal to take anticoagulant therapy, older age, stroke and bleeding risk or history, female sex, presence of different comorbidities, prescription of antiplatelet agents or non-steroidal anti-inflammatory drugs, recurrent falls or history of falls, and others. Physician preferences make a significant contribution to guideline non-adherence, particularly those related to their beliefs and practice patterns. More focus on the risk of bleeding associated with OACs, use of formal bleeding assessment tools by only few physicians are among the reasons for guideline non-adherent anticoagulation treatment.
Conclusion The extent of guideline non-adherence differs according to geographic region, healthcare setting, and risk stratification tools used. Guideline adherence has gradually improved over recent years, but a significant proportion of patients are still not receiving guideline-recommended therapy. Physician-related and patient-related factors (such as patient refusals, bleeding risk, older age, and recurrent falls) also contribute to guideline non-adherence, especially to undertreatment. Quality improvement initiatives that focus on undertreatment, especially in the primary healthcare setting, may help to improve guideline adherence.