Reversal of direct oral anticoagulants: Guidance from the Anticoagulation Forum

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Video Abstract

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Abstract

Direct oral anticoagulants, or DOACs, are prescribed to millions of patients to prevent life-threatening events such as stroke and thromboembolism. However, scenarios such as serious bleeding or the need for an emergent invasive procedure may require active reversal of anticoagulant effects. Two reversal agents are now FDA-approved, but their use in clinical practice is complicated by lack of evidence on their comparative effectiveness with other strategies, cost, availability, and safety concerns. To provide clarity for clinicians, the Anticoagulation Forum, the largest organization of anticoagulant providers, has developed clinical guidance on the use of reversal agents as well as their acquisition and management. This expert guidance is designed to help clinicians and institutions ensure the safe and effective treatment of patients taking anticoagulants. First, and perhaps most importantly, reversal agents should be the last line of defense. For patients with bleeding, these agents should be administered only if bleeding is life-threatening, into a critical organ, or is not controlled with conservative measures such as stopping the anticoagulant and compressing the bleeding site. Because approved reversal agents are drug-specific, the agent and dosage should be tailored to a given case of major bleeding as outlined in the guidance document. Treatment with a reversal agent may also be warranted in patients undergoing an emergent invasive procedure. In such cases, a reversal agent should be administered only if the procedure cannot be safely performed while the patient is anticoagulated and cannot be delayed. For patients who have overdosed on anticoagulants or experienced trauma without bleeding, reversal agents are not routinely recommended. Clinicians should opt for standard drug poisoning or trauma evaluation and management procedures. Whenever reversal strategies are employed, clinicians should be mindful of resuming anticoagulation as soon as safely feasible to avoid additional adverse events, such as thromboembolism. Because available resources vary widely among health systems, there is no “one-size-fits-all” solution for optimizing the use of reversal agents. The high cost of these agents may limit their availability. As such, individual facilities should take stock of their capacity to acquire and administer reversal agents. They should also closely monitor how and when these agents are used to inform future practices and improve overall patient care and safety. Finally, health systems should stay apprised of emerging evidence regarding anticoagulation reversal and adjust their processes and systems accordingly.