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Neuraxial anesthesia/analgesia techniques in the patient receiving anticoagulant or antiplatelet medication

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INTRODUCTION

Neuraxial anesthesia techniques are used in many settings: as intraoperative anesthetics, for postoperative pain control, in the peripartum period, and in the management of chronic pain. Patients who are candidates for neuraxial anesthesia techniques may be receiving chronic antiplatelet or anticoagulation therapy, may require anticoagulation during or following surgery, or may receive prophylactic medication for venous thromboembolism in the perioperative period. Patients who receive anticoagulant or antiplatelet therapy are at increased risk for hemorrhagic complications of neuraxial techniques, most notably spinal epidural hematoma (SEH).

This topic discusses the use of neuraxial anesthesia in patients who are receiving medications that interfere with coagulation or platelet function, including the level of risk and the timing of neuraxial procedures relative to the antithrombotic (anticoagulant and antiplatelet) medication. Issues related to neuraxial anesthesia in individuals with impaired hemostasis for reasons other than medications (eg, severe thrombocytopenia) are discussed separately. (See ["Adverse effects of neuraxial analgesia and anesthesia for obstetrics"](#), [section on 'Neuraxial analgesia and low platelets'](#) and ["Overview of neuraxial anesthesia"](#), [section on 'Spinal-epidural hematoma \(SEH\)'](#).)

For the purpose of this topic, neuraxial anesthesia refers to spinal, epidural, or combined spinal-epidural procedures that may be performed for surgical anesthesia or perioperative analgesia.

Recommendations for interventional spine and pain procedures in patients receiving antiplatelet or anticoagulant medications are discussed separately [1]. (See ["Spinal cord stimulation: Placement and management"](#), [section on 'Patient screening'](#).)

In general, the recommendations presented here are applicable to patients having paravertebral blocks, deep plexus blocks, or deep peripheral nerve blocks (ie, in anatomic locations not amenable to the application of pressure to control hemorrhage). (See "[Overview of peripheral nerve blocks](#)", [section on 'Patients on antithrombotic medication'](#).)

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