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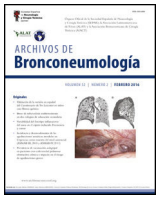

Editorial

Perioperative and Periprocedural Management of Antithrombotic Therapy☆

Manejo perioperatorio y periprocedimiento del tratamiento antitrombótico

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The number of patients treated with oral anticoagulants and antiplatelets has increased in recent years.[1] In most cases, these are long-term treatments, so it is not uncommon for patients taking them to require, at some point, a surgical procedure or intervention that calls for antithrombotics to be interrupted. The risks and benefits of this decision should be evaluated in depth, and patient safety must always take precedence.

Both pulmonologists and thoracic surgeons face this challenge in clinical practice on a daily basis. Nevertheless, the recommendations published by the American College of Chest Physicians[2] and the European Respiratory Society/American Thoracic Society[3] are limited in this respect. Some more recent documents refer to the management of anticoagulant and antithrombotic agents in patients undergoing pulmonary interventions in general,[4] and techniques such as flexible bronchoscopy in particular,[5] but awareness of these protocols among professionals is still very low.

A consensus document on the perioperative and periprocedural management of antithrombotic therapy was recently published in Spain on the initiative of the Spanish Society of Cardiology (SEC), in which more than 20 Spanish scientific societies participated, including the Spanish Society of Pulmonology and Thoracic Surgery (SEPAR).[6] Its main objective is to establish a series of scientifically supported recommendations and consensus guidelines that help to standardize clinical practice between the different specialties.

The document classifies thromboembolic risk as high, medium or low, taking into account the disorder for which anticoagulation was indicated. With regard to antiplatelet therapy, the definition of thrombotic risk should take into consideration time to intervention, type of presentation, clinical characteristics of the patient, and the treatment administered. Risk of bleeding is stratified, similarly to thromboembolic risk, into 3 groups: (a) low, when adequate hemostasis can be achieved; (b) moderate, when hemostasis is more difficult to achieve and bleeding increases the need for transfusion or re-intervention; and (c) high, when hemorrhage might threaten the patient's life or compromise the outcome of the surgery. The possibility of bleeding should be considered in non-surgical procedures, such as bronchoscopy. Hemorrhagic risk, then, is considered low if the risk of bleeding is less than 1% and intermediate-high if it is greater than 1%.

In the area of respiratory diseases, the consensus document recommends that the hemorrhagic risk be stratified according to the type of intervention: (a) low, in cases of diagnostic bronchoscopy, bronchoalveolar lavage, and bronchial brushing, thoracentesis, tunneled pleural catheter, and pleural tube placement, provided that such procedures are ultrasound-guided; (b) moderate, if these interventions are performed without ultrasound, and also in sympathectomy for hyperhidrosis, and (c) high, in certain interventions (bronchial biopsy or transbronchial cryobiopsy, FNAB without ultrasound, endobronchial ultrasound with transbronchial FNAB, tumor laser ablation, electrocoagulation or cryo-recanalization, implantation of prostheses, bronchial or tracheal dilation, rigid bronchoscopy, foreign body removal, closed or transthoracic pleural biopsy, or thoracoscopy) and surgical procedures (surgery of the lung, chest wall, trachea, bronchi and pleura, and interventions in the mediastinum, thoracic outlet and diaphragm, including esophagectomy).

Guidelines are provided for all these situations to help the clinician decide when anticoagulation/antiplatelet therapy should be suspended and when to reintroduce it after an interventional procedure or surgery. So, for example, in the case of anticoagulation, some general considerations would have to be taken into account, such as evaluating the possibility of continuing anticoagulation in low-risk procedures, in which the risk of bleeding is clinically insignificant and can be managed by the operator, resorting to bridge therapy with heparin only in patients with high thromboembolic risk, and reintroducing coagulation 24 h after the procedure. General recommendations for patients receiving antiplatelets are: acetylsalicylic acid should be continued except for procedures in which it is contraindicated (e.g., neurosurgery); bridging therapy should be used in very particular cases in which a high thrombotic risk coincides with a moderate-to-severe bleeding risk and when

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the intervention cannot be postponed; and antiplatelet therapy should be reintroduced in the first 24 h after the procedure.

In short, this document sets out in a simple format the most important recommendations for surgical procedures or interventions, both urgent and non-urgent, in patients receiving antithrombotic therapy (antiplatelets or anticoagulants). It is the responsibility of pulmonologists and thoracic surgeons to adapt these guidelines to our setting, by creating specific working groups and promoting research in this field. We also have a responsibility to follow the example of other specialties and monitor the safety of these recommendations during the procedures and interventions that we conduct in our daily clinical practice.[7]

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