Management of Anticoagulants in Procedures That Can Cause Bleeding

Manejo de anticoagulantes en procedimientos que pueden producir una hemorragia

To the Editor,

Vivas et al.[1] are to be congratulated on their article; reaching a consensus among 24 scientific societies is a notable achievement.

We have read the article carefully, and while we agree with almost all its content, a review of the literature[2–9] reveals some areas of concern. One major concern is the limited information on bridging therapy with low – molecular-weight heparin (LMWH). Aside from stipulating that heparin bridging should be restricted to diseases associated with a high thromboembolic risk, the consensus document barely discusses LMWH. For example, there is no mention of the appropriate LMWH dose for patients at high thromboembolic risk (equivalent to 1 mg/kg/12 h enoxaparin, or 1.5 mg/kg if a single dose is used[2–4]). Moreover, we were confused by the following sentences: "The last dose of LMWH should be administered 12 hours before the operation or procedure in the case of prophylactic doses and 24 hours in the case of therapeutic doses. Unfractionated heparin should be administered 4 to 6 hours in advance." This implies the existence of distinct prophylactic and therapeutic doses; however, we were unable to find any other reference to prophylactic and therapeutic doses in the text. This generates doubts about what course of action should be adopted. Similarly, the article does not specify when postprocedure LMWH should be initiated or how long the treatment should be maintained.

A second major concern relates to which patients should be maintained on anticoagulation therapy. Table 1 Table 1 of the supplementary material lists the low-risk procedures that do not require suspension of anticoagulation, corresponding to the assignation "a" in Figure 2 Figure 2 of the main text. The problem is that this assignation applies to very few patients, thus giving the impression that some hospital specialties have been over cautious in emphasizing the remote risk of bleeding and a thromboembolic episode.

For example, the text specifically mentions pulmonary vein catheter ablation, but this is not reflected in the supplementary material, where this procedure is not considered. Another controversial omission is dental procedures, contrasting with the inclusion of dental extraction in other guideline documents on anticoagulant use,[2,8,9] including the guidelines of the Spanish College of Dentists.[10]

Our final concern relates to ophthalmology. The article states that anticoagulation can be maintained during procedures performed under topical anesthesia. However, the preceding section on surgery contraindicates anticoagulation during cataract surgery. Does this then refer only to cataract surgery not performed under topical anesthesia? Other guidelines and manuals include a list of procedures requiring suspension of anticoagulation,[2,2,7–9] and this consensus document would have been strengthened by the inclusion of such a practical list.

We would like once again to congratulate the authors on the completion of this consensus document, which we are sure will be consulted and followed by health care professionals in all specialties.

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REFERENCES

1. Vivas D, Roldan I, Ferrandis R, et al. Perioperative and Periprocedural Management of Antithrombotic Therapy: Consensus Document of SEC, SEDAR, SEACV, SECTCV, AEC, SECPRE, SEPD, SEGO, SEHH, SETH, SEMERGEN, SEMFYC, SEMG, SEMICYUC, SEMI, SEMES, SEPAR, SENEC, SEO, SEPA, SERVEI, SECOT and AEU. *Rev Esp Cardiol.* 2018;71:553–564.
2. Douketis JD, Spyropoulos AC, Spencer FA, et al. Perioperative management of antithrombotic therapy: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines. *Chest.* 2012;141(2 Suppl):e326S–e350S.
3. Valdivia J. Anticoagulantes orales en el periodo perioperatorio: ¿qué hacemos? Comisión de Antiagregantes y Tratamientos Antitrombóticos. *Hospital Son Espases.* 2015. Available at: http://www.elcomprimido.com/FARHSD/ComisionCATAHUSD/ProtMedicacionAntitromboticaPerioperatoriaCATA2015_Cas.pdf. Accessed 9 May 2018.
4. Egocheaga MI, Martín Rioboó E. *Algoritmos para la práctica clínica en la anticoagulación con dabigatrán.* Madrid: Jarpyo Editores; 2015.
5. Doherty JU, Gluckman TJ, Hucker WJ, et al. 2017 ACC expert consensus decision pathway for periprocedural management of anticoagulation in patients with nonvalvular atrial fibrillation: A report of the American College of Cardiology Clinical Expert Consensus Document Task Force. *J Am Coll Cardiol.* 2017;69:871–898.
6. Lip GYH, Douketis JD. Perioperative management of patients receiving anticoagulants. Available at: https://www.uptodate.com/contents/perioperative-management-of-patients-receiving-anticoagulants?search= perioperativemanagement-of-patients-receiving-anticoagulants&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1. Accessed 9 May 2018.
7. Steffel J, Verhamme P, Potpara TS, et al. The 2018 European Heart Rhythm Association Practical Guide on the use of non-vitamin antagonist oral anticoagulants in patients with atrial fibrillation. *Eur Heart J.* 2018;39:1330–1393.
8. Heidbuchel H, Verhamme P, Alings M, et al. Updated European Heart Rhythm Association Practical Guide on the use of non-vitamin K antagonist anticoagulants in patients with non-valvular atrial fibrillation. *Europace.* 2015;17:1467–1507.
9. Raval AN, Cigarroa JE, Chung MK, et al. Management of patients on non-vitamin K antagonist oral anticoagulants in the acute care and periprocedural setting: a scientific statement from the American Heart Association. *Circulation.* 2017;135:e604–e633.
10. Consejo de Dentistas. Organización colegial de dentistas de España. Protocolo de seguridad hemostásica de los procedimientos odontológicos en pacientes tratados con anticoagulantes. Available at: https://coelp.es/images/pdfs/2017_07_Seguridad_hemostsica_en_pacientes_-tratados_con_anticoagulantes.pdf. Accessed 9 May 2018.

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