

EDITORIAL

ICM on VTE: A Major Step Forward in Patient Care

Numerous organizations such as the American Academy of Orthopaedic Surgeons (AAOS)¹ and the American College of Chest Physicians (ACCP)² in the U.S., and numerous other organizations across the globe, have created guidelines related to the issue of venous thromboembolism (VTE) in orthopaedics.

In view of the imperfect data available on the subject of VTE, it is no surprise that these guidelines have been criticized on many grounds. Many guidelines have limited their scope to a specific surgical procedure (e.g., total hip or knee replacement), some have failed to recognize the importance of variations in geographic and racial predisposition to VTE, and almost all have attempted to create recommendations by either preferentially or exclusively relying on high-level studies only. While understandable from the methodological perspective, the latter strategy has resulted in the inclusion of studies conducted by the pharmaceutical industry, as part of regulatory requirements, to have new chemoprophylaxis agents approved for clinical use. Such studies often have been powered to evaluate the difference in the incidence of distal deep venous thrombosis as detected with venography but not clinically important symptomatic VTE or the rare fatal pulmonary embolus, which is the real concern for both the medical community and patients^{3,4}. Some guidelines have been criticized for overlooking the complications that can arise as a result of administration of some of these agents.

The International Consensus Meeting (ICM), having recognized the limitations of the current guidelines and the need for unbiased randomized trials with clinically important end points, convened a group of experts from around the globe to generate guidelines or recommendations that address the real-world issues. Delegates from 135 international societies, 68 countries, and various specialties, including anesthesia, cardiology, hematology, internal medicine, and orthopaedics, were invited to analyze the literature in a systematic review format and to create practical recommendations related to all sub-

specialties in orthopaedics that would also have global applications. This immense initiative engaged nearly 600 experts who followed the strict Delphi process⁵, as in prior ICM activities^{6,7}, to generate the monumental document that is available at <https://journals.lww.com/jbjsjournal/toc/2022/03161>. Over a period of 1 year, and with the critical guidance of the steering committee and engagement of the organizing committee, librarians, biostatisticians, epidemiologists, and experts from the Cochrane group, all published work related to VTE and orthopaedics was reviewed to generate a response/recommendation for the nearly 200 issues (questions) that had been collated from the field.

The delegates were nominated by societies or recruited on the basis of their interest in the subject matter and were selected on the basis of their published expertise (with a minimum of 3 publications related to VTE). Each question was assigned to 2 delegates who were provided the MeSH terms for the conduct of systematic reviews. After 6 months of literature review and extraction of data, the delegates created the initial draft of the recommendations. The first draft of the document was then sent for review by 1 or 2 other delegates with expertise in that subject matter. The revised document underwent a second review by an additional group of delegates.

The document underwent 2 additional reviews prior to submission to *The Journal of Bone and Joint Surgery*, where each collated document underwent the standard editing review.

We believe that this great effort on the part of so many will serve the needs of clinicians, and, more importantly, the patients we serve, in the near term as we continue to support efforts to develop primary research data for VTE. ■

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