

LETTERS TO EDITORIAL

УДК 616.14-005.6-084:616-089.23-01](049.3)(100)

DOI: <http://dx.doi.org/10.15674/0030-598720221-2133-134>**International consensus on prevention of venous thromboembolism in patients after orthopedic interventions****S. Ye. Bondarenko¹, V. E. Maltseva¹, O. V. Vysotskyi²**¹ Sytenko Institute of Spine and Joint Pathology National Academy of Medical Sciences of Ukraine, Kharkiv² Kherson Regional Clinical Hospital. Ukraine

In March 2022, new international recommendations for the prevention of venous thromboembolism in patients after major orthopedic interventions (Recommendations from the International Consensus Meeting on Venous Thromboembolism) were published [1–10]. The prerequisite for the creation of this consensus was the imperfection of the available data and recommendations for the prevention of thromboembolism in the perioperative period.

An international consensus meeting, recognizing the limitations of current guidelines and the need for unbiased, randomized trials with a clinically relevant outcome, convened a group of experts from around the world to create guidelines that address the challenges of thromboprophylaxis after orthopedic interventions. Among the authors of this document, which was published in «The Journal of Bone and Joint Surgery» (JBJS), there were about 600 delegates from 135 international societies, 68 countries, different by profession, in particular: anesthesiologists, cardiologists, hematologists, specialists in internal medicine and orthopedists. Ukraine was represented by the following scientists: Stanislav Bondarenko, Valentina Maltseva (Professor M. I. Sytenko Institute of Spine and Joint Pathology, National Academy of Sciences of Ukraine, Kharkiv); Oleksandr Vysotsky (CME «Kherson Regional Clinical Hospital» of Kherson Regional Council), Olena Turchyn (SE «Institute of Traumatology and Orthopedics of the National Academy of Medical Sciences of Ukraine», Kyiv) [1]. Delegates were asked to review the literature in a systematic review format and create practice guidelines related to all areas of orthopedics. Experts followed a rigorous Delphi7 process to develop this important document and worked for a year under the guidance of an organizing committee involving librarians, statisticians, epidemiologists and experts from the Cochrane Group. All published studies related to

thromboprophylaxis and orthopedics were reviewed to obtain answers to almost 200 questions.

Delegates were nominated by societies or selected based on their experience in the field, as well as publication experience with a minimum of three publications related to the prevention of venous thromboembolism. Each question was developed by two specialists. They could work together or independently. After 6 months of working with professional literature the initial (first) draft of recommendations was created. It was sent for consideration to one or two other delegates experienced in the field. Comments and suggestions arising from this initial review were provided to the authors. The revised document was re-examined by an additional group of specialists. The documents were also posted on the International Consensus Meeting (ICM) website for review and discussion [11]. All comments generated on the website were also forwarded to the authors.

The paper underwent two additional reviews before submission to the JBJS journal. One review was provided by a member of the organizing committee to ensure its completeness, and another by the corresponding editor for each major. The document was then sent for the usual JBJS editorial review before being published.

The recommendations include a section with general approaches to thromboprophylaxis after orthopedic interventions [1] and specialized ones, in particular: in the case of surgery of the upper limb and wrist [2], shoulder or elbow [3], foot or lower leg [4], hip or knee [5], the spine [6], under the conditions of oncology [7], in the case of operations in children [8], after injuries [9] and sports injuries [10].

They are presented in the form of separate questions, the answer to which is laid out as a small systematic review and the review has been double-reviewed before the final publication. Depending on the reliability and amount of scientific data,

the degree of evidence is provided (strong, moderate or limited). Also, next to each question, the results of the delegates' voting are given.

Among the questions of a general nature, one of the most important was the determination of the optimal therapeutic agent for the prevention of venous thromboembolism, namely after total hip or knee arthroplasty, which are the most frequent surgical interventions in orthopaedics («What is the most optimal VTE prophylaxis following TKA/THA?» question No. 3) [5]. According to the conducted systematic review, the authors have found that aspirin is the best choice in view of the cost, low incidence of bleeding as a complication, and absence of the need to control the blood level of the drug. Low-dose aspirin is recommended for primary prevention in patients at moderate to high risk of thromboembolism after total knee or hip arthroplasty. The level of evidence for this recommendation was defined as strong. According to the voting results, 76.92 % of the delegates agreed, 19.66 % disagreed, 3.42 % abstained, and a Strong Consensus was obtained. The given answer to the question is only an example, which, in our opinion, is necessary for a better understanding of the presentation of the recommendations. To obtain detailed information on the prevention of thromboembolism after total hip and knee arthroplasty, it is necessary to read the full text of the recommendations [5].

In total, the full text of the recommendation is 328 pages long and is available free of charge on the website of the JBJS journal and major international bibliographic databases.

Conflict of interest. The authors declare no conflict of interest.

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The article has been sent to the editors 07.05.2022

INTERNATIONAL CONSENSUS ON PREVENTION OF VENOUS THROMBOEMBOLISM IN PATIENTS AFTER ORTHOPEDIC INTERVENTIONS

S. Ye. Bondarenko ¹, V. E. Maltseva ¹, O. V. Vysotskyi ²

¹ Sytenko Institute of Spine and Joint Pathology National Academy of Medical Sciences of Ukraine, Kharkiv

² Kherson Regional Clinical Hospital. Ukraine

✉ Stanislav Bondarenko, Doctor of Traumatology and Orthopaedics: bondarenke@gmail.com

✉ Valentyna Maltseva, Phd in Biol. Sci.: maltseva.val.evg@gmail.com

✉ Oleksandr Vysotskyi, MD: vavkherson@gmail.com