ASH releases new clinical practice guidelines for venous thromboembolism

27 November 2018

Venous thromboembolism (VTE), a term referring to blood clots in the veins, is a highly prevalent and far-reaching public health problem that can cause disability and death. Despite effective new options for prevention and treatment, VTE remains a threat underappreciated by the general public, causing up to 100,000 deaths annually in the United States alone.

VTE includes deep-vein thrombosis (DVT), a blood clot that typically forms in the deep veins of the leg, and pulmonary embolism (PE), a life-threatening condition that occurs when a blood clot breaks free and becomes lodged in the arteries of the lung. Blood clots can affect anyone—from the healthy to the chronically ill—in a variety of settings, including pregnant women, children, and people who are hospitalized, meaning that the burden of effective prevention, diagnosis, and treatment falls on a broad range of physicians.

The American Society of Hematology, the world's largest professional society concerned with the causes and treatment of blood disorders, has long recognized the need for a comprehensive set of guidelines on the treatment of VTE to help the medical community better manage this serious condition. In partnership with the McMaster University GRADE Centre, a world leader in guideline development and an authority on thrombosis, ASH brought together more than 100 experts including hematologists, other clinicians, guideline development specialists, and patient representatives to tackle this challenge. Today, ASH announced the results of their collective efforts—the 2018 ASH Clinical Practice Guidelines on Venous Thromboembolism—in a press event timed to the publication of the first six chapters in the Society's peer-reviewed journal Blood Advances. Four more chapters are in development.

"In recent years, a tremendous body of evidence has been generated to guide prevention, diagnosis, and treatment of VTE, yet approaches are often applied inconsistently. The 2018 ASH guidelines took the latest evidence into account to make recommendations that in some instances will reinforce existing best practices and in other instances will change practice," said Adam Cuker, MD, MS, Chair, ASH VTE Guidelines Coordination Panel and HIT Panel and Clinical Director of the Penn Blood Disorders Center and Director of the Penn Comprehensive and Hemophilia Thrombosis Program, University of Pennsylvania in Philadelphia. "ASH believes it is essential to provide updated treatment guidelines that reflect this increased knowledge and can help the medical community better prevent, diagnose, and treat VTE."

The 10 evidence-based clinical guidelines chapters cover VTE through a number of lenses, in areas in which there is currently uncertainty and variation in clinical practice:

- Prophylaxis for hospitalized and non-hospitalized medical patients
- Diagnosis of VTE
- Optimal management of anticoagulation therapy
- Heparin-induced thrombocytopenia
- VTE in the context of pregnancy
- Treatment of pediatric VTE
- Treatment of deep-vein thrombosis and pulmonary embolism (anticipated in 2019)
- VTE in patients with cancer (anticipated in 2019)
- Thrombophilia (anticipated in 2019)
- Prevention of VTE in surgical patients (anticipated in 2019)

The 2018 ASH guidelines were developed using state-of-the-art methodology to ensure they meet the highest standards for trustworthiness and transparency. The panels were explicit about how recommendations were determined and open about the quality of the evidence that factored into the
final decision-making process.

"McMaster University is the birthplace of evidence-based medicine and is an international leader in guideline methodology," said Holger Schünemann, MD, Ph.D., Vice-Chair, VTE Guidelines and Lead Investigator, Systematic Review and Methods Team and Chair of the Department of Health Research Methods, Evidence & Impact at McMaster University in Hamilton, Ontario. "In this partnership with ASH, we applied advanced methodology to ensure the production of guidelines that meet the highest standards for rigor and credibility that would be useful for clinicians and would improve the quality of care received by our patients."

ASH is well-positioned to convene a varied set of clinical experts in VTE, as well as patient representatives, who serve together on the guideline panels.

"Hematologists are not the only medical professionals who diagnose and treat VTE," said Dr. Cuker. "This is why we felt it so important to collaborate with a broad cross-section of physicians from other disciplines who also serve on the front lines of improving VTE outcomes. Their perspectives and those of our patient representatives were critical to this process."

The 2018 ASH guidelines are the first of a larger guideline development initiative for ASH, which includes a commitment to the timely update of existing guidelines and the development of new ones on a range of hematologic conditions.