Summary: Two reviewers independently evaluated 280 systematic reviews or meta-analyses evaluating diagnostic strategies for VTE, as well as more than 700 additional abstracts of randomized controlled trials. Ultimately, medium- and high-quality data (using the Scottish Intercollegiate Guidelines Network [SIGN] criteria) informed this study. Prediction models calculating pretest probability of deep venous thrombosis or pulmonary embolism are of value in determining both the necessity of imaging studies as well as informing the choice of specific study for validation. D-Dimer testing and pretest probability combined with imaging in selected outpatients is safe and cost effective. In-patients should go directly to imaging if pulmonary embolism is suspected.

Comments: High-value care is the safest and best care for the patient at the right price. The use of pretest clinical prediction tools for VTE leads to a standardized approach and reasonable ordering of diagnostic imaging for confirmation. Without clinical probability determination, there will be over-testing and increased healthcare costs. The data is strong, the tools are good when used precisely. There are always areas for improvement and additional research.

Information overload?

Treatment of Varicose Veins, International Consensus on Which Major Complications to Discuss With the Patient: A Delphi Study

de Mik SM, Stubenrouch FE, Legemate DA, Balm R, Ubbink DT. Phlebology 2019;34:201-7.

Conclusions: This study determined via international consensus 12 major and 12 minor complications of varicose vein treatment should be discussed with a patient as part of the informed consent and shared-decision making process.

Summary: This study of key opinion leaders in varicose vein treatments was done using Delphi methodology to asses both short-term and long-term complications of several modalities of venous treatment: open and endovenous ablation techniques as well as sclerotherapy. Complications were divided into minor, moderate, or severe severity with the Delphi-iterative process used in five rounds to allow for consensus and consideration of newly introduced complications. This list may assist physicians in treatment option discussions with their patients.

Comments: How much information should be discussed with a patient? How do we decide what would be important to the individual? When do patients reach information saturation and stop hearing the litany of risks and benefits of proposed procedures — have all relevant facts been disclosed? Does the surgeon always include the option of "doing nothing"? Is informed consent truly "informed"? This study, while simplistic in scope and methodology, is a reminder that even simple procedures can have extensive and impactful outcomes. Patients do have a right to know.

The need for inclusion of geriatric patients in research

Effects of Preventive Use of Compression Stockings for Elderly With Chronic Venous Insufficiency and Swollen Legs: A Systematic Review and Meta-Analysis

Dahm KT, Myrhaug HT, Strømme H, Fure B, Brurberg KG. BMC Geriatr 2019;19:76.

Conclusions: Lower grades of compression stockings may provide adequate control of symptoms of chronic venous insufficiency, including edema as well as venous thrombosis but the data has not been conclusive. Class 2 stockings are probably better than class 1 in decreasing ulcer recurrence rates in elderly patients, but higher compression may not be of additional benefit.

Summary: The risk of venous insufficiency increases with age, immobility, and decreased exercise. While data support compression as beneficial, particularly in patients less than 70 years of age, elderly patients may require assistance in donning medical-grade compression hose. This well-constructed systematic review and meta-analysis was performed to provide an updated analysis of compression stocking effectiveness. A review of five randomized, controlled trials evaluating class 2 (20-30 mm Hg) or 3 (30-40 mm Hg) stockings in elderly patients were included, the quality of evidence assessed as moderate by the GRADE criteria. Class 2 stockings were probably better than class 1 (<20 mm Hg) in reducing ulcer recurrence, but the results were mixed and cohort size limited. Higher grades did not demonstrate incremental decreases. There was not clear improvement in symptomatology, prevention of venous thrombosis, or improving mobility regardless of compression class.

Comments: Compliance with stockings is critical to demonstrate improvements in chronic venous insufficiency and prevention of sequelae. I believe most of us would rather a patient wear a lower grade of compression hose consistently than be noncompliant with higher compression owing to discomfort or difficulty donning.