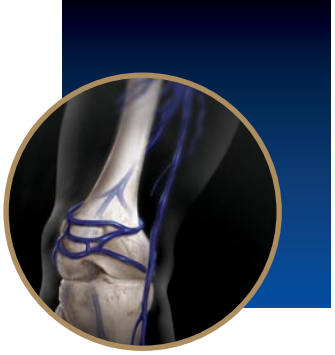

Venous Thromboembolism Prophylaxis: Who's Right—Orthopedic Surgeons or Chest Physicians?

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Venous thromboembolism (VTE) prophylaxis is a core measure of quality care established by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the Centers for Medicare and Medicaid Services (CMS), but compliance with using performance measures of this core indicator continues to be a subject of controversy.

In this *American Journal of Orthopedics (AJO)* supplement, Clifford W. Colwell Jr., MD, expertly reviews the current guidelines for VTE prophylaxis for total knee arthroplasty, total hip arthroplasty, and hip fracture surgery. These guidelines, which have been acknowledged by JCAHO and CMS as representing the standard of care, are based on American College of Chest Physicians (ACCP) recommendations.[1] Although the idea of guidelines has been widely embraced by the orthopedic community, very few orthopedic surgeons actually comply with the details of the ACCP recommendations—specifically, with maintaining an international normalized ratio (INR) of 2.0 to 3.0 for patients on coumadin (given the possibility of surgical site hematoma formation and wound drainage with a consequent higher infection rate). Concerns regarding the ACCP guidelines for orthopedic patients have been raised by highly regarded academic orthopedic surgeons as well.[2]

Elsewhere in this *AJO* supplement, Paul A. Lotke, MD, succinctly reviews the controversy and refers to the recent efforts of the American Academy of Orthopaedic Surgeons (AAOS) to establish a new set of VTE prophylaxis guidelines (posted on the AAOS Web site in May 2007[3]). This enormous undertaking by AAOS was independently reviewed, and all the AAOS data were found to be evidence based. AAOS workgroup recommendations more accurately reflect most orthopedic surgeons' current practice, which is to maintain an INR of less than 2.0 for patients who are on coumadin prophylaxis and are at standard risk for pulmonary embolism (PE) and major bleeding. AAOS guidelines also accept use of aspirin for such patients, including the vast majority of orthopedic patients. These recommendations are believed to satisfy the requirements for preventing symptomatic PE while lowering the risk for surgical site wound complications, but following them may result in a higher incidence of asymptomatic deep venous thrombosis (DVT). Most orthopedic surgeons would accept this higher risk, as the incidence of postthrombotic syndrome after asymptomatic DVT is very low.

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Who is right? It depends. Do you want to decrease DVT incidence and accept a higher rate of wound problems and subsequent infection (ACCP), or do you want to decrease symptomatic PE incidence and have a lower rate of wound complications (AAOS)? Both positions are supported by published data and surgeon experience. I believe that the practicing orthopedic surgeon should decide which regimen is best for each patient. Unfortunately, the confusing inconsistencies in published guidelines render such a decision extremely difficult.

AAOS is to be commended for addressing the VTE prophylaxis controversy. Although few orthopedic surgeons comply strictly with ACCP recommendations, *all* orthopedic surgeons seek the simultaneous benefits of preventing symptomatic PEs and minimizing wound complications.

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But how are we to realize the benefits of following the AAOS guidelines?

Merely posting updated guidelines on a Web site is not sufficient. JCAHO and CMS recognize only the ACCP guidelines for DVT prophylaxis standards. Until these two standards-setting and accrediting bodies also begin accepting the new AAOS guidelines as performance measures, a hospital that follows these recommendations will find itself out of compliance with the DVT core measure and therefore in danger of jeopardizing its JCAHO quality rating (ie, receiving a label of *outlier* or *requirement for improvement)* and losing additional CMS payments (a result of new "pay for performance" initiatives). No hospital can afford these consequences.

Nevertheless, there is hope for a resolution to this dilemma.

First, the AAOS guidelines are slated for review at upcoming JCAHO research meetings. It is my hope that these guidelines will be accepted as performance measures compliant with VTE prophylaxis. Implementation would then take 6 to 12 months.

Second, there are indications that ACCP members, having gained a greater appreciation for orthopedic surgeons' concerns about wound complications, will closely consider the AAOS guidelines when they meet to review and revise their own VTE prophylaxis recommendations. These professional organizations need to communicate and cooperate better to set the appropriate standard.

AAOS and orthopedic surgeons need to impart to hospital quality improvement committees and to the public that these new VTE guidelines comply with the highest quality of care. In adopting a peer-reviewed, evidence-based approach, AAOS has taken a giant first step toward addressing the current practice of the vast majority of orthopedic surgeons.

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Collectively, we must urge ACCP, JCAHO, and CMS to review and embrace these guidelines, which more effectively balance the need for VTE prophylaxis with a lower risk for wound complications in our orthopedic patients.

References

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