Inadequate VTE Prophylaxis Makes Costs Soar

BY BRUCE JANCIN

SAN DIEGO — Partial venous thromboembolic event prophylaxis in at-risk medical and surgical inpatients is associated with a mean 2-day greater hospital length of stay and $22,000 more per patient in total hospital charges than for recipients of best-practice appropriate prophylaxis, according to a large national study.

Thus, partial VTE prophylaxis—that is, any VTE prophylaxis not in accord with American College of Chest Physicians guidelines in terms of dose or duration—not only entails adverse clinical consequences, it also carries a significant economic price, Dr. Alpesh Amin observed at the annual meeting of the American College of Chest Physicians.

He presented a retrospective case-control study of economic and clinical outcomes in 21,001 medical and surgical inpatients around the nation who received VTE prophylaxis. The data were obtained from the Thomson Reuters MarketScan Hospital Drug Database.

The VTE prophylaxis was in step with ACCP guidelines in a mere 24.5% of patients, and such low rates have also been seen in numerous other studies. The in-hospital VTE rate in the appropriate-prophylaxis group was 1.9%, compared with 1.4% in the three-quarters of patients who got partial prophylaxis, according to Dr. Amin, professor and chairman of the department of medicine and executive director of the hospitalist program at the University of California, Irvine.

Mean hospital length of stay was 9.3 days in the appropriate-prophylaxis group, compared with 11.2 days with partial prophylaxis. Mean hospital charges were $47,981 with appropriate prophylaxis and $69,997 with partial prophylaxis. After adjustment for patient variables and hospital characteristics, including bed count, teaching status, and geographic region, the adjusted mean difference in total charges in a multivariate analysis was $21,260.

Total unadjusted hospital costs averaged $17,386 per patient in the appropriate VTE prophylaxis group, compared with $23,823 in the partial prophylaxis group. After adjustment, the mean difference in hospital costs was $6,370 less in favor of the appropriate-prophylaxis group.

Venous thromboembolic events cost the U.S. health care system an estimated $1.5 billion annually. The assumption is that most of the cost savings documented in this study in the appropriate-prophylaxis group stemmed from VTEs avoided, although that wasn't formally studied. A randomized clinical trial would be required to rule out the possibility that the outcome differences were due to confounders that were not controlled for, the physician noted. ■

Disclosures: *The study was funded by Sanofi-Aventis. Dr. Amin reported no relevant financial interests.*

MY TAKE

What It Takes To Curb VTE

This is an important reminder that just doing "anything" for VTE prophylaxis is not the same as doing the "right" thing with respect to evidence-based medicine.

The current focus on VTE prophylaxis rates often misses the point that we need to improve our use of *appropriate* VTE prophylaxis. This means that we need to give the right method to the right patient at the right dose for the right duration of time. And for many patients, the intensity of VTE prophylaxis isn't commensurate with the VTE risk of the patient.

This study highlights how costly it is when physicians don't get VTE prophylaxis "right."

FRANKLIN A. MICHOTA, M.D., *is the director of academic affairs in the Department of Hospital Medicine at the Cleveland Clinic. He reports no relevant conflicts of interest.*