

Review and commentary of key non-JVS-VL articles

There go my favorite television shows

TV Viewing and Incident Venous Thromboembolism: The Atherosclerotic Risk in Communities Study



Kubota Y, Cushman M, Zakai N, Rosamond WD, Folsom AR. *J Thromb Thrombolysis* 2018;45:353-9.

Conclusions: Increased number of hours spent watching television (TV) was independently associated with an increased risk of venous thromboembolism despite exercise level or patient's body weight.

Summary: TV viewing is the most common sedentary behavior around the world. Data collected in the Atherosclerosis Risk in Communities Study, 1987 to 1989, included information on the frequency of TV watching. Among the more than 15,000 participants available for follow-up, the baseline age was in the mid-50s. Persons who were more likely to have increased TV viewing were African American, current smokers, have a history of cardiovascular disease, and a higher body mass index. Statistical modeling showed an association when adjusted for age, sex, and race. The association between TV viewing and venous thromboembolism persisted regardless of exercise. A higher body mass index weakened the association, but it still continued.

Comments: The baseline data collected for the Atherosclerosis Risk in Communities Study population health study was in 1987 to 1989. The participants are now 30 years older with likely increased levels of retirement, comorbid conditions, and decreased mobility. I would like to see a more current study. Obesity has increased, especially in younger groups, and TV viewing is ubiquitous with widespread use and availability of electronic devices. It is likely that modern data will show an even stronger association and I may rethink my binge-watching habits.

Direct oral anticoagulants for patients with cancer: More data needed

Edoxaban for the Treatment of Cancer-Associated Venous Thromboembolism



Raskob GE, van Es N, Verhamme P, Carrier M, Di Nisio M, Garcia D, et al. *Hokusai VTE Cancer Investigators N Engl J Med* 2018;378:615-24.

Conclusions: Oral edoxaban was similar to subcutaneous dalteparin for the treatment of cancer-associated venous thromboembolism (VTE) for a composite outcome of recurrent VTE or major bleeding. The rate of recurrent venous thromboembolism was lower, but the rate of major bleeding was higher with edoxaban than with dalteparin.

Summary: Patients with cancer are known to be at increased risk of VTE and evidence-based guidelines recommend that cancer-associated VTE be treated with at least 6 months of low-molecular-weight heparin. Edoxaban, an oral direct factor Xa inhibitor, has recently been approved for the treatment of VTE and is at least as effective as vitamin K antagonist (warfarin). This trial of 1050 adult patients with advanced cancer compared edoxaban with subcutaneous dalteparin for the treatment of VTE in a prospective randomized trial. The primary outcome measure was a composite of VTE or major bleeding. This outcome occurred in 12.8% of the edoxaban group and 13.5% of the dalteparin group (hazard ratio, 0.97; 95% confidence interval, 0.70-1.36; $P = .006$). The rate of major bleeding was significantly higher with edoxaban and mainly related to upper gastrointestinal bleeding.

Comments: Long-term low-molecular-weight heparin for VTE treatment is burdensome, not only because it is expensive, but also because it must be administered subcutaneously. Direct oral anticoagulants are clearly more desirable because of the delivery mode, but need to be proven to be at least as safe and effective as standard therapy for VTE. I would say the jury is still out on this agent.

We have come a long way!!

Diagnosis of Venous Thromboembolism: 20 Years of Progress



Wells PS, Ihaddadene R, Reilly A, Forgie MA. *Ann Intern Med* 2018;168:131-40.

Conclusions: A great deal of research has been done identifying clinical prediction tools and developing reliable algorithms for diagnosis and treatment of venous thromboembolism (VTE). This study reviewed the progress to date as well as the evidence behind an algorithmic approach and knowledge gaps which still remain.