Medical Xpress

# Warfarin and aspirin are similar in heart failure treatment

February 3 2012

In the largest and longest head-to-head comparison of two anti-clotting medications, warfarin and aspirin were similar in preventing deaths and strokes in heart failure patients with normal heart rhythm, according to late-breaking research presented at the American Stroke Association's International Stroke Conference 2012.

"Although there was a warfarin benefit for patients treated for four or more years, overall, warfarin and aspirin were similar," said Shunichi Homma, M.D., lead author of the study and the Margaret Milliken Hatch Professor of Medicine at Columbia University in New York.

In the 11-country Warfarin versus Aspirin in Reduced Cardiac Ejection Fraction (WARCEF) trial, researchers followed 2,305 patients with heart failure and normal heart rhythm for up to six years (average 3.5 years). The patients were on average 61 years old, and the power of the heart's main pumping chamber, the left ventricle (left ventricular ejection fraction), was less than 35 percent (normal is 55 percent or higher).

Thirteen percent of the patients experienced a stroke or transient ischemic attack and were at heightened risk of recurrence. Patients with heart failure in general are at increased risk of death, blood clots and strokes.

Researchers randomly assigned patients to receive either 325 mg/day of aspirin or warfarin doses calibrated to a pre-specified level of blood

thinning. Warfarin therapy requires frequent blood testing to monitor its dosage in order to achieve the desired level of blood thinning. In order to avoid bias, all patients had blood drawn on the same schedule and their pills adjusted so neither the patients nor their treating physicians knew which regimen they were taking.

Death, ischemic stroke (caused by blockage of an artery feeding the brain) or intracerebral hemorrhage (bleeding inside the brain), which combined were the study's primary endpoint, occurred at a rate of 7.47 percent for patients assigned to warfarin and 7.93 percent for patients assigned to aspirin. The difference was not statistically significant.

However, "in the group of patients followed for more than three years, those on warfarin did better in comparison to the aspirin patients," Homma said. Over the entire study period, patients receiving warfarin were just over half as likely to develop a stroke, a component of primary endpoint, as those taking aspirin. The rates of stroke were low with annual rates of 0.72 percent in patients assigned to warfarin and 1.36 percent for those on aspirin.

Researchers evaluated the safety of the anti-clotting medications by monitoring major bleeding events other than intracerebral hemorrhage (which was a component of the primary endpoint). Each year, major bleeds occurred in 1.8 percent of patients on warfarin and 0.9 percent of those on aspirin — a statistically significant difference.

"As expected, the overall bleeding rate was higher with warfarin," Homma said. "However, not all bleeds are equal, and the one that patients fear the most — bleeding within the brain (intracerebral hemorrhage) occurred rarely in both groups." It occurred in 0.12 percent per year in the warfarin group and 0.05 percent per year in the aspirin group.

"Given that there is no overall difference between the two treatments and that possible benefit of warfarin does not start until after 4 years of treatment, there is no compelling reason to use warfarin, especially considering the bleeding risk", Homma said. The investigators are analyzing whether certain subgroups of patients benefited more from each treatment.

Provided by American Heart Association

Citation: Warfarin and aspirin are similar in heart failure treatment (2012, February 3) retrieved 4 May 2024 from
https://medicalxpress.com/news/2012-02-warfarin-aspirin-similar-heart-failure.html