

Seniors Hospitalized for Heart Failure Up 230%

BY BRUCE JANCIN
Denver Bureau

NEW ORLEANS — The annual number of Americans aged 65 years or older hospitalized for heart failure jumped more than 230% between 1980 and 2006.

"Heart failure has reached epidemic levels. The prevention and treatment of heart failure have become an urgent public health need with national implications," Dr. Longjian Liu declared in presenting his

analysis of 27 years' worth of National Hospital Discharge Surveys.

And the peak of the epidemic has yet to come, as the rate of increase will become even more pronounced in the near future, Dr. Liu said at the annual scientific sessions of the American Heart Association.

This trend is due to a combination of factors, including the explosive growth in the prevalences of diabetes, obesity, and chronic kidney disease; improved survival after MI; and the graying of America.

Indeed, the aging of the baby boomers will have an enormous impact on the heart failure epidemic. In Dr. Liu's study of the 1980-2006 U.S. experience, which included more than 2.2 million hospitalized patients over age 65 years, individuals aged 75-84 had an adjusted 2.3-fold greater rate of hospitalization for heart failure than those aged 65-69. Those aged 85 and up had a 4.1-fold greater rate than the 65- to 69-year-olds, and constitute the fastest-growing segment of the U.S. population.

For men aged 65 and older, the rate of hospitalization for heart failure rose from 16.6/1,000 hospitalizations in 1980 to 22.9 in 2006. Among women, the rate was 13.9/1,000 in 1980 and 19.6 in 2006, said Dr. Liu of Drexel University School of Public Health, Philadelphia.

The relative risk of being hospitalized for heart failure among seniors alive during the last 5 years of the study period was 37% greater than for those living in 1980-1984. ■

PE resulting from DVT is the most common cause of preventable death among hospitalized patients.⁵ In the DVT FREE study funded by sanofi-aventis, which included 5451 patients with ultrasound-confirmed DVT, 71% did not receive any prophylaxis within 30 days of diagnosis.¹⁰ Moreover, nonsurgical patients were much less likely than surgical patients to receive appropriate DVT prophylaxis.¹⁰ The American College of Chest Physicians (ACCP) evidence-based clinical practice guidelines recommend that, for every general hospital, a formal, active strategy that addresses the prevention of VTE be developed (Grade 1A).⁵

"Providing preventive treatment (or primary prophylaxis) to these individuals can dramatically reduce the likelihood of a blood clot or PE."¹¹

Recommendations for VTE Prophylaxis in Select Hospitalized Patients⁵ (Adapted From 2008 ACCP Guidelines)

Prophylaxis of DVT in medical patients with restricted mobility during acute illness^{5,11,a}

- For acutely ill medical patients admitted to hospital with congestive heart failure (CHF) or severe respiratory disease, or who are confined to bed and have one or more additional risk factors, including active cancer, previous VTE, sepsis, or inflammatory bowel disease: ACCP recommends thromboprophylaxis with low-molecular-weight heparin (LMWH) or low-dose unfractionated heparin (LDUH) (all Grade 1A)

Prophylaxis of DVT following abdominal surgery^{5,11,a}

- For higher-risk general surgery patients undergoing a major procedure for cancer: ACCP recommends thromboprophylaxis with LMWH or LDUH three times daily (each Grade 1A)
- For patients undergoing major general surgical procedures: ACCP recommends thromboprophylaxis continue until discharge from hospital (Grade 1A)

Prophylaxis of DVT following hip- or knee-replacement surgery^{5,11,a}

- For patients undergoing total hip replacement (THR) or total knee replacement (TKR): ACCP recommends routine thromboprophylaxis with LMWH (at the usual high-risk dose) or adjusted-dose vitamin K antagonist (VKA) (international normalized ratio [INR] target, 2.5; INR range, 2.0 to 3.0) for at least 10 days (all Grade 1A)
- For patients undergoing THR: ACCP recommends thromboprophylaxis be continued beyond 10 days and up to 35 days after surgery with LMWH (Grade 1A) or a VKA (Grade 1B)

Table 2. ACCP 2008 Guidelines: recommendations for VTE prophylaxis.

LOVENOX® (enoxaparin sodium injection) is indicated for the prophylaxis of DVT, which may lead to PE:

- In medical patients who are at risk for thromboembolic complications due to severely restricted mobility during acute illness
- In patients undergoing abdominal surgery who are at risk for thromboembolic complications
- In patients undergoing hip-replacement surgery, during and following hospitalization
- In patients undergoing knee-replacement surgery

Two Clinical Trials Showed LOVENOX® Provided Effective VTE Prophylaxis in Medically Ill Patients

MEDENOX (Prophylaxis in Medical Patients With Enoxaparin) was a multicenter, multinational, double-blind study that included 1102 acutely ill medical patients randomized to either LOVENOX® or placebo for 6 to 14 days during hospitalization.¹²

The incidence of DVT or PE was significantly lower in patients treated with LOVENOX® than placebo (5.5% vs 14.9%, respectively).¹² The use of LOVENOX® was associated with a 63% reduction in risk of VTE.¹²

There was no statistically significant difference in major bleeding events^{b,c} or thrombocytopenia comparing LOVENOX® with placebo.^{12,13}

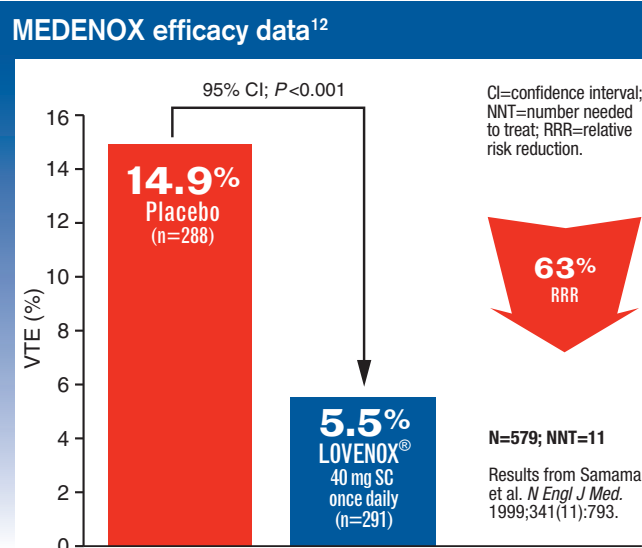


Figure 1. Short-term incidence and RRR of VTE in medical patients treated with LOVENOX® (40 mg) vs placebo. P values are for RRR.

^a Grades of recommendation – 2008 Guidelines: ACCP Evidence-Based Clinical Practice Guidelines (8th edition)—Grade 1A—strong recommendation based on high-quality evidence; Grade 1B—strong recommendation based on moderate-quality evidence; Grade 1C—strong recommendation based on low- or very low-quality evidence.¹¹

^b Based on the rate of major bleeding on LOVENOX® up to 24 hours after the last dose.¹³

^c Hemorrhage was classified as major if bleeding was overt and was associated with the need for transfusion of 2 or more units of packed red blood cells or whole blood, or with a decrease in the hemoglobin concentration of 2.0 g/dL or more from baseline, or if bleeding was retroperitoneal, intracranial, or fatal.¹²

Please see a brief summary of prescribing information, including boxed WARNING, at the end of the article.