

# More Evidence of Danger From Heart Surgery Drug

By Ed Edelson

HealthDay Reporter

Wednesday, February 20, 2008; 12:00 AM

WEDNESDAY, Feb. 20 HealthDay News) -- Two new studies confirm an increased incidence of death and kidney damage among people given Trasylol (aprotinin), a drug used to reduce bleeding during coronary artery bypass surgeries.

The studies suggest the drug raises patients' risks over both the short- and long-term.

Trasylol's German maker, Bayer AG, suspended marketing in the United States last November after preliminary results of a Canadian trial revealed problems with the medication.

"There continues to be an association between aprotinin and higher death rates and kidney damage," said Dr. Andrew Shaw, an associate professor of anesthesiology at Duke University and the lead author of one of the reports in the Feb. 21 issue of the *New England Journal of Medicine*.

The study he led looked at more than 10,000 people who underwent coronary artery bypass surgery. The death rate was 32 percent higher among the 1,343 people who got Trasylol as compared to the 2,029 who received no medication to limit their bleeding. The mortality rate for those taking Trasylol was also 27 percent higher than those given aminocaproic acid, a different medication used to limit bleeding.

One important facet of the study is that the follow-up period was as long as 10 years, Shaw said. Trasylol was put on the market in the United States in 1993.

The study also confirmed the incidence of kidney damage by precise measurements of serum creatinine, a kidney-related protein, Shaw said. "There does appear to be an association between continued use of aprotinin and reduced kidney function," he said.

The second study, led by physicians at Harvard Medical School and Brigham and Women's Hospital, used data on more than 78,000 coronary bypass surgery cases, comparing results when either Trasylol or aminocaproic acid was used.

This study looked at the risk of death over the short term, with average follow-up of about a week after surgery. More than 33,500 patients in the study received Trasylol, while almost 45,000 got the other drug.

After adjusting for a number of factors, the risk of death was 64 percent higher in the Trasylol group compared to those who got aminocaproic acid, the study found. It also found an increased need for dialysis, a blood-cleaning procedure used in kidney failure, among those who got the drug.

This data was already available to the FDA when it asked Bayer to remove Trasylol from the market, noted the study's lead author, Dr. Sebastian Schneeweiss, vice chief of pharmacoepidemiology at Brigham and Women's.

Both he and Shaw said a final verdict on use of the drug hinges on the release of all of the data from the Canadian study, expected in the near future.

"What is still needed is information on whether there might be subgroups in the patient population where there might be more benefit than harm in using aprotinin," Schneeweiss said. Analysis thus far has failed to find such a benefit among subgroups, including people with diabetes or other ailments that complicate their coronary problems, he said.

The basic message is that when you have a new drug that acts similarly to an older medication, comparative studies need to be done before the new drug gets widely used, concluded an accompanying editorial by Dr. Wayne A. Ray, a professor of preventive medicine at Vanderbilt University in Nashville, Tenn.

"Had this been done 10 years ago with Trasylol, many lives would have been saved," he said.

A push for such testing needs to come from the FDA, however, because "there is no commercial incentive to do them," Ray said. "The public is not being adequately protected if we let millions of people use a drug before we truly understand it."

### **More information**

There's more on coronary artery bypass surgery at the [American Heart Association](#).

SOURCES: Andrew Shaw, associate professor, anesthesiology, Duke University, Durham, N.C.; Sebastian Schneeweiss, M.D., vice chief, pharmacoepidemiology, Brigham and Women's Hospital, Boston; Wayne A. Ray, M.D., professor, preventive medicine, Vanderbilt University, Nashville, Tenn.; Feb. 21, 2008, New England Journal of Medicine