PCI Beats Thrombolysis in MI Patients Under 80

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SNOWMASS, COLO. — Primary percutaneous coronary intervention proved clearly superior to thrombolytic therapy in elderly acute MI patients in an international trial—but only up to age 80, Dr. Cindy L. Grines reported at a conference sponsored by the Society for Cardiovascular Angiography and Interventions.

"Over age 80, there appeared to be ab-

solutely no advantage to primary PCI [percutaneous coronary intervention]. In fact, there was a suggestion of lower mortality in patients who received thrombolytics, although it wasn't significant," in the Senior Primary Angioplasty in Acute Myocardial Infarction (Senior PAMI), she said.

"I think we can safely say that primary PCI is the preferred reperfusion strategy in patients who are less than age 80. How we manage the older elderly—those who are over age 80—is still up in the air," said

Dr. Grines of William Beaumont Hospital, Royal Oaks, Mich.

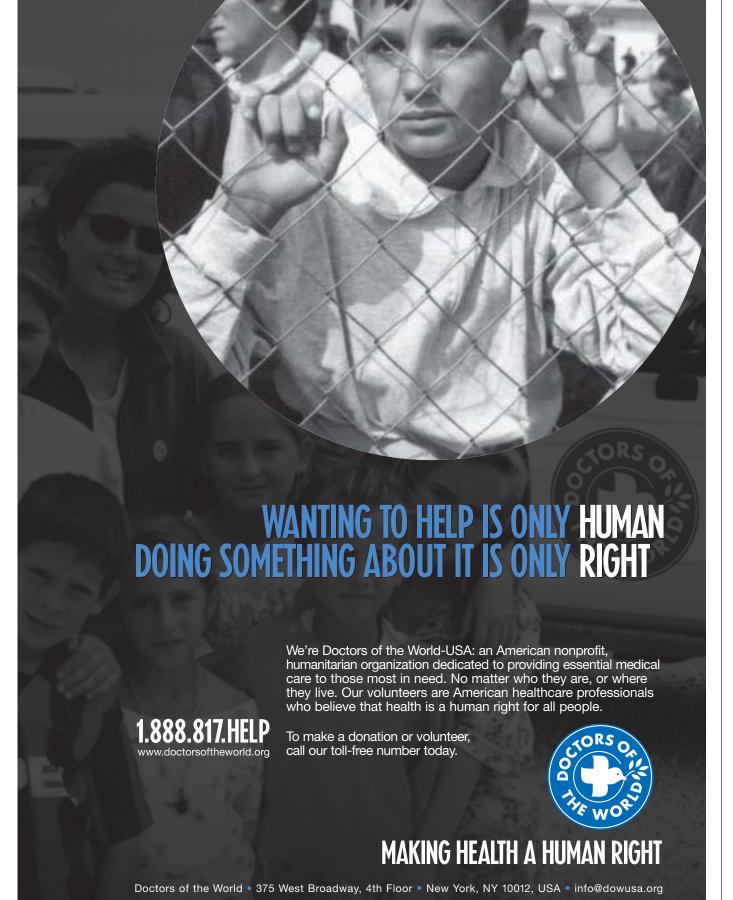
Senior PAMI was an international trial involving 483 elderly patients with acute MI randomized to primary PCI or thrombolytic therapy with whatever agent was favored at a particular participating institution. It was a highly selected population. Participants could have no contraindications to thrombolytic therapy, couldn't be on warfarin, and had to present with a blood pressure not in excess of 180/100

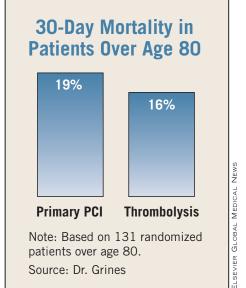
mm Hg. More than 75% of Senior PAMI enrollees had multivessel coronary disease, higher than typical in younger MI populations. Comorbidities were common; many seniors were admitted from nursing homes.

An aggressive catheterization policy was pursued in the thrombolysis group. Of these patients, 21% underwent cardiac catheterization within 12 hours, owing to persistent or progressive chest pain; 51% were catheterized during their initial hospital stay; 37% underwent nonprotocol PCI; and 4% had coronary artery bypass surgery during their hospitalization.

As expected, the acute procedural success rate with primary PCI was lower than that in younger MI populations. Only 86% of PCI-treated seniors achieved TIMI-3 blood flow. "We usually find that figure is 93% or 94%," Dr. Grines said. The combined 30-day end point of death, disabling stroke, or recurrent MI occurred in 14% of patients in the primary PCI arm and in 18% of those assigned to thrombolytic therapy, a highly significant difference.

A prespecified subgroup analysis on the basis of age showed impressive advantages for primary PCI in the 352 patients aged 70-80 years. Their 30-day mortality was 7%, compared with 11% in the throm-





bolysis arm. The 30-day rate of death or disabling stoke was 8% in the PCI arm and 12% in patients assigned to thrombolytic therapy. The triple end point of death, disabling stroke, or recurrent MI occurred in 8% of the PCI group and in 17% of those who received thrombolysis—a 55% reduction in relative risk favoring mechanical reperfusion. But in patients older than 80 years, the 30-day mortality was 19% with primary PCI and 16% with thrombolytic therapy. "We're not doing a very good job in the ultraelderly patients.

I don't know if that's an issue of PCI technique, or perhaps we're giving them too much contrast," Dr. Grines said.

Senior PAMI was stopped last year before the planned enrollment total was reached—not because of safety issues, but dwindling enrollment. "We'd been dragging this trial on for more than 5 years and recruitment had gotten worse and worse as physicians became more comfortable with primary PCI and decided they just couldn't ethically withhold it from elderly patients," he said.