AHA: Allogeneic stem cells OK in ischemic cardiomyopathy

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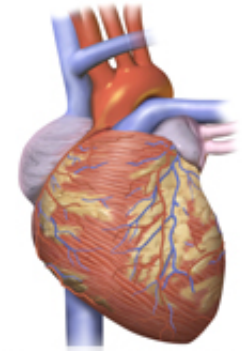

Image courtesy of Blausen Medical

For patients with ischemic cardiomyopathy, allogeneic bone marrow-derived mesenchymal stem cells are safe; and delivery of bone marrow mononuclear cells to patients with ST-segment elevation myocardial infarction after percutaneous coronary intervention has no effect on the recovery of left ventricular function, according to two studies published online Nov. 6 in the *Journal of the American Medical Association* to coincide with presentation at the American Heart Association's Scientific Sessions 2012, held from Nov. 3 to 7 in Los Angeles.

(HealthDay)—For patients with ischemic cardiomyopathy (ICM), allogeneic bone marrow-derived mesenchymal stem cells (MSCs) are safe; and delivery of bone marrow mononuclear cells (BMC) to patients with ST-segment elevation myocardial infarction (STEMI) after percutaneous coronary intervention (PCI) has no effect on the recovery of left ventricular function, according to two studies published online

Nov. 6 in the *Journal of the American Medical Association* to coincide with presentation at the American Heart Association's Scientific Sessions 2012, held from Nov. 3 to 7 in Los Angeles.

Joshua M. Hare, M.D., from the Interdisciplinary Stem Cell Institute in Miami, and colleagues compared allogeneic with autologous MSCs in a phase 1/2 study involving 30 patients with left ventricular dysfunction due to ICM. The researchers found that the one-year incidence of serious adverse events was 33.3 percent in the allogeneic group and 53.3 percent in the autologous group (P = 0.46), with no significant donor-specific alloimmune reactions stimulated by allogeneic MSCs.

Jay H. Traverse, M.D., from the Minneapolis Heart Institute at Abbot Northwestern Hospital, and colleagues conducted a randomized trial involving 120 patients with STEMI with left ventricular dysfunction after primary PCI who received intracoronary infusion of BMC or placebo at three or seven days after PCI. The researchers found that at six months there was no significant increase in the left ventricular ejection fraction in the BMC group compared with the placebo group (P = 0.96). No significant treatment effect on regional left ventricular function was seen in infarct or border zones.

"Overall, the delivery of BMCs at thee or seven days after a STEMI and primary PCI did not affect subsequent improvement in left ventricular function at six months compared with placebo," Traverse and colleagues write.

Several authors from both studies disclosed financial ties to the biopharmaceutical industry. Several authors from the Hare study disclosed holding patents related to the study.

More information: Abstract - Hare
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More Information