

## **PUBLISHER'S NOTE**

These predictions and prophecies were written and completed by June 30, 2008:

A mighty transformational method of treating heart attack victims as well as those with congestive heart failure is on the very threshold of discovery! Patients who would be doomed to an invalid's existence, followed by a flow, suffocating and agonizing death will suddenly receive a new lease on life, thanks to the discovery of a gene cell whose implantation or injection immediately repairs damaged vessels and arteries! ....Something like liquid car radiator repair.)

heart failure

injection

Like amphibians whose severed and amputated limbs will actually grow back; even children born without will be made whole! And multiple sets of teeth—shark-like—for adults, when this gene is discovered and triggered.

## Man's own stem cells used in bid to fix his heart

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The Canadian Press

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TORONTO — When doctors performed a coronary artery bypass on a Montreal man with a failing heart, they added a little something else before closing up his chest -- stem cells purified from his bone migrow that they had removed earlier that day.

Jean-Paul Tremblay, a 59-year-old construction worker, is believed to be the first patient in Canada to have his heart injected with his own stem cells while having open-heart bypass surgery for chronic heart failure, said Dr. Nicelas Noiseux, a cardiac surgeon at Universite de Montreal.

"No research team in the country had implemented such a complete treatment process, going from harvesting stem cells in the patient, treating them and injecting them directly into the myocardium (heart muscle), said Noiseux, co-principal investigator of a study on the experimental treatment.

"The patient is loing remarkably well, because the day I did surgery his heart was a little bit scary, he said in an interview from Montreal.

"And now ... it's just almost like a normal heart. This is an extraordinary case and hopefully we're going to have some great

Tremblay said he injected with his own stem cells the stem-cell injections last December.

"I feel much better," he said from Montreal. In fact, he is "quite amazed" at the improvement in his health, and it has given him hope that he will now have a future.

Noiseux said the entire procedure was performed on the same day. It began in the morning with Tremblay having bone marrow removed from his pelvic bone. The marrow was then sent to collaborator Dr. Denis Claude Roy at Maisonneuve-Rosemont Hospital, who used a special machine to isolate the stem cells.

Once purified, the stem cells were returned to Noiseux at Centre hospitalier de l'Universite de Montreal, where he injected them directly into Tremblay's heart after completing the bypass surgery. Because the stem cells are taken from the patient, they will not be rejected by the body's immune system.

"They do a very good job," he said. "These cells, when you inject them in the heart, they are able to regenerate the blood vessels and they are also able to regenerate (heart muscle cells)."

Scientists have great hopes for stem cells because they have the ability to turn into every single specialized cell that make up the human body. The human embryo is a plentiful source of stem cells. But as the body takes shape and matures, they become scarcer. However, bone marrow which constantly regenerates the blood supply and the immune system, remains a source of some stem cells.

While excited about how well his first patient has done, Noiseux said more heart failure patients must be tested to determine how much improvement can be attributed to the stem cells regenerating the heart and how much to the bypass surgery improving blood flow to the organ.

The Montreal group plans to recruit 20 patients, with half receiving stem cells plus bypass and the other half getting a placebo injection plus the surgery. The two groups will then be compared to see what role, if any, the stem cells have played.

Researchers at Toronto General Hospital are joining the clinical trial, and are awaiting approval to conduct the research using a new-generation device to separate stem cells before beginning recruitment of their own 20 patients.

Cardiac surgeon Dr. Richard Weisel, director of the Toronto General Research Institute, said if the collaborative research shows the stem cells are regenerative, doctors would have a new tool to help patients facing end-stage heart failure.

Currently, these patients' best hope is a heart transplant. But donor hearts are in short supply and many patients die while on the transplant waiting list.

"We want to give more to the heart failure patient," agreed Noiseux. "But stem cells are probably not for everyone."

"Hopefully we're going to show that this is safe, feasible and we can apply it to more patients. This is probably the key message that we want to give."

Weisel said that if the concept works, "we hope that in both Montreal and Toronto we'll be able to have a simpler system to be able to do this on a routine basis.

"So this might become much more user-friendly and more available to our patients if we could get better technology to isolate stem cells in the operating room quickly and be able to inject them back into the patient by the time the operation is over."