

(July 30, 2007) Adult Stem Cell Research Puts Patients First, Proponents Say

Adult Stem Cell Research Puts Patients First, Proponents Say
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(CNSNews.com) - Doctors and patients who have been involved in medical treatments derived from "adult" stem cells say they back federal legislation to promote such research -- because "this stuff works."

They made the comments in support of the Patients First Act of 2007 at a news conference in Washington, D.C. late last week.

The head of an organization that supports research using stem cells from all sources -- including human embryos -- told Cybercast News Service that the bill "isn't worth the paper it's written on."

Speaking at the news conference, David Prentice, senior fellow for life sciences with the Center for Human Life and Bioethics, noted the ubiquity of adult stem cells.

"Over the last few years, we've realized that virtually every tissue of the adult body has adult stem cells," he said.

Adult stem cells can be collected from bone marrow, amniotic fluid, the placenta, testicular tissue, cord blood and nasal tissue, he said, adding that the cells "are very flexible" when used to treat a number of diseases or injuries.

"After a heart attack, some of the heart tissue is damaged or dead," Prentice stated. "We can now inject these adult-type stem cells into the damaged part of the heart and stimulate repair of that tissue."

That treatment is what saved Doug Rice of Spokane, Wash., who said during the news conference that he suffered from congenital heart failure and diabetes, and had found no suitable match for a transplant.

"In November of 2005, my doctor said, 'Doug, you've got three to four months to live without a mechanical heart,'" he recalled. "I couldn't walk from here to the end of the room and had to sleep sitting up because my lungs will fill up every day."

But "my ex-wife found on the Internet that they were treating heart disease in Thailand, so we went there in January of 2006," Rice explained. "They drew blood and shipped it to Israel, where they separated the stem cells. A week later, they injected it back into my body. Three weeks later, I got back to Spokane and was greatly improved."

Amit Patel, a physician at the University of Pittsburgh Medical Center, described the treatment as "putting a new engine in an old car, only better. Cells are small bio-reactors. They sense the environment that they're injected into, and they release growth factors and attract other cells and other substances to help the heart work better."

"To date, 1,800 patients have been treated in trials around the world," Patel added. He said the procedure "minimizes risk and maximizes safety by taking people's own cells and putting them into the heart."

Another speaker at the news conference was Stephen Sprague, who said he was diagnosed with leukemia 12 years ago but today is cured of the disease -- "one of the early, early examples of the power of adult stem cells and cord blood."

"There is a mother and her now-10-year-old daughter walking the streets of New York who did what mothers didn't do 10 years ago," Sprague continued. "She donated her daughter's cord blood to a cord blood bank. They will never, ever know what they've done for me and for my family."

He said that in 99 percent of the approximately four million births in the U.S. each year, the leftover cord blood is discarded, a practice he'd like to see changed. "The collection of cord blood is not research; it's recycling medical waste," Sprague said.

'Focused on the cells'

Patel cautioned, however, that adult stem cell treatment is "not a miracle cure" and does involve some risk -- although he also indicated that some countries view the treatment as no more dangerous than a blood transfusion.

"The sad thing about this is that 750,000 people a year die of heart disease in the United States, and there are procedures out there that can solve the problem," Rice said. "I see millions of dollars being spent on research that, in my opinion, is a waste of money, on the embryonic stem cells, and it just is very frustrating."

Unlike stem cell research and treatments using adult cells, research using cells obtained from human embryos is controversial because the embryos are destroyed in the process. Proponents say embryonic cells offer greater potential for future cures.

Sean Tipton, president of the Coalition for the Advancement of Medical Research, told Cybercast News Service that his organization supports all types of stem cell research, but "we work harder on embryonic stem cell research because it's not being funded adequately by the federal government at this point."

Since 2001, the Bush administration has restricted federal funding for embryonic research to work on a limited number of stem cell lines that existed at that point, created from embryos that had already been destroyed. There are no restrictions of private funding for the work.

Tipton was dismissive of the Patients First Act, which is co-sponsored by Reps. Randy Forbes (R-Va.) and Dan Lipinski (D- Ill.). He said the National Institutes of Health have been "funding adult stem cell research for years and will continue to do so without this bill."

"Nobody disputes that research using adult stem cells should go forward," he said, "but what the sponsors of this legislation and politicians like them are trying to do is to appear that they are for stem cell research when they oppose what's thought to be the most promising form -- embryonic stem cell research."

As for assertions that adult stem cells have been used to treat many diseases while embryonic cells have yet to do so, Tipson stated that most of the treatments cited by adult stem cell research proponents "are individual case studies, not clinical trials showing that they are reliable cures, with the notable exception of some of the leukemias and blood cancers."

Reiterating his support for adult stem cell research, Prentice said the focus should be on what has been proven to work.

"The problem is that everyone has been focused on the cells. The bottom line is if we're considering patients first, it's the adult stem cells that are really the most promising right now and able to deliver on some of those promises."