Planned Parenthood Video: Why Use Tissue From Aborted Fetuses? - NBC News

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Activists who released a video they say shows a Planned Parenthood doctor discussing the sale of tissue from aborted fetuses have riled up abortionrights opponents, with House Speaker John Boehner saying the case makes him want to "vomit" and Republicancontrolled committees in Congress promising to investigate.

The political firestorm raises a question: Why would anyone use tissue from an aborted fetus?

It's because some scientists hope they <u>might provide cures</u> for a range of diseases from Parkinson's to crushed spinal cords.

A Source of Stem Cells

Cells from embryos and very early fetuses have properties that fully developed cells do not. What most researchers are after if they use fetal tissue are the stem cells.

The term "stem cell" is confusing because it encompasses many different

types of cells. There are the <u>embryonic</u> <u>stem cells</u>, which come from days-old embryos and which have the power to morph into any type of cell in the body blood, brain, bone or organ. They can be difficult to direct and there's a whole industry devoted to orchestrating the growth and development of these cells into desired tissue types.



A microscopic view shows a colony of human embryonic stem cells (light blue) growing on fibroblasts (dark blue) in this handout photo released to Reuters by the California Institute for Regenerative Medicine, on March 9, 2009. (Photo: A microscopic view shows a colony of human embryonic stem cells (light blue) growing on fibroblasts (dark blue) in this handout photo released to Reuters by the California Institute for Regenerative Medicine, on March 9, 2009.California Institute for Regenerative Medicine via REUTERS)

Then there are adult stem cells, found in everyone's body. These are the stem cells that are taken from the bone marrow, for example, to treat patients with cancer. They're already partially developed and they also can elicit an immune response if transplanted into another person's body. That's why clinics look so hard for someone who is a "match" for a bone marrow transplant.

Fetal stem cells fall somewhere in between. They grow well in lab dishes and can be kept alive and thriving for years. They're not fully developed and so they don't cause the life-threatening immune response that adult stem cells do when transplanted into somebody.

It's not clear just how frequently these cells are gathered for research uses. Scientists grow batches of cells from many different sources and those that thrive are used for years and passed around. The book "The Immortal Life of Henrietta Lacks" focuses on one batch that's been used for decades, taken from a cervical cancer patient.

From Vaccines to Regenerative Medicine

Fetal cells were used to develop vaccines, including the measles and polio vaccines.

Companies such as NeuralStem Inc. have developed cells taken from aborted fetuses into possible therapies. They're testing some now in people with crushed spinal cords who cannot walk, to see if the cells can grow over the injury and restore the nerve connections. A team at Harvard Medical School's McLean Hospital has been testing fetal stem cells in patients with Parkinson's disease. In Parkinson's, the brain cells that produce an important messagecarrying chemical called dopamine are destroyed. The transplants aim to replace those cells and restore the dopamine.

They've had dramatic effects in some patients, not-so-dramatic effects in others.

There's work developing stem cells from all three sources to treat type-1 or juvenile diabetes, which is caused when the body mistakenly destroys the pancreas cells that produce insulin. Cells from fetal liver or pancreas have been tested - either source might be well primed to develop into the desired cell type.



(Photo: National Institutes of Health)

Organ Shortages

The case of diabetes especially illustrates why fetal tissue might be needed: not enough people donate organs after death. There's a procedure called the Edmonton Protocol, in which <u>pancreatic cells can be transplanted</u> from the bodies of people who have just died. It's given several hundred patients a break from taking insulin, although the transplant eventually fails in almost everyone and they must return to taking insulin. Diabetes researchers complain it's very difficult to get the pancreas cells they need, because there is such a shortage of donated organs. According to the United Network for Organ Sharing, more than 123,000 Americans are waiting for an organ transplant.

So what scientists are working on is to create batches of cells, or even whole organs, in the labs. Supporters of stem cell research say all different kinds of stem cells are needed for this work until the best method for producing these regenerative tissues can be found.

"Given the enormous potential of stem cells to the development of new therapies for the most devastating diseases, it is important to simultaneously pursue all lines of promising research," the National Institutes of Health <u>says on its website</u>.

Profit or Helping Medicine?

The activists, who belong to a littleknown group called the Center for Medical Progress, say they made the video to show that Planned Parenthood sells organs and tissues from abortions. Planned Parenthood denies it.

"I want to be really clear: The allegation that Planned Parenthood profits in any way from tissue donation is not true," Planned Parenthood president Cecile Richards says in a statement released Wednesday.

Just this week a team at the University of California San Francisco <u>published a</u> <u>study</u> showing that 95 percent of women who had abortions did not regret it. Planned Parenthood said if a woman has decided to have an abortion, then donating the tissue otherwise bound for an incinerator at least helps medical science.

"I thank those women and families who have chosen tissue donation at some point in their lives," Richards said. "Your commitment to lifesaving research, developing treatments for diseases like Parkinson's and Alzheimer's, is important and compassionate, and it should be respected - not attacked."

The full <u>two-hour-long video</u> shows the activists, who are posing as staffers from a biotechnology company seeking fetal tissue, wining and dining Dr. Deborah Nucatola, senior director of medical services for Planned Parenthood Federation of America. They discuss how to obtain tissue from aborted fetuses.

Nucatola can be heard <u>repeatedly</u> <u>denying</u> the tissue is being sold. "This is not a new revenue stream the affiliates are looking at. This is a way to offer the patient the service that they want, do good for the medical community," she says. Nonetheless, politicians say the video raises serious questions.

"I could talk about the video but I think I'd vomit trying to talk about it. Disgusting," Boehner told reporters Wednesday.

Boehner says Congress will investigate. After a similar scandal in 1999, Congress passed a law banning the sale of fetal tissue or body parts, although such tissue may be freely donated.

Legal Battles

Embryonic stem cells were every bit as controversial as fetal stem cells for years. Some must be made <u>using</u> <u>cloning technology</u>, while others are made using discarded embryos from fertility clinics. In 2012, after years of legal battles and fights in Congress, <u>the</u> <u>Supreme Court ruled</u> that the federal government could pay for research using these cells.

But researchers are looking for less controversial and potentially better sources for these cells, anyway. They understand the distaste for using cells from aborted fetuses and even from IVF clinic leftovers. That's why there's so much work to create so-called induced pluripotent stem cells (iPS cells), which would be made using a little piece of a patient's skin, for instance.

These mature cells can be tricked chemically or genetically into reverting to an immature state that resembles fetal or embryonic stem cells, then directed to <u>develop into liver</u>, or muscle, or <u>nerve</u>, or other desired tissue type.

This work with pluripotent stem cells has eclipsed much of the work dose using fetal tissue.