

LifeCell – Daily News Update

June 22 , 2009

Key Industry News:

Publication	timesofindia.indiatimes.com
Headline	Fallopian tubes offer stem cell source
Gist of the article	<p>Researchers from Human Genome Research Centre at the University of Sao Paulo have claimed that discarded human fallopian tubes can be a rich source of stem cells for regenerative medicine.</p> <p>It has previously been shown that mesenchymal stem cells obtained from umbilical cords, dental pulp and adipose tissue, which are all biological discards, are able to differentiate into muscle, fat, bone and cartilage cell lineages.</p> <p>During the study, lead researcher Tatiana Jazedje set out to isolate and assess the differentiation potential of mesenchymal stem cells from discarded human fallopian tubes.</p> <p>The fallopian tubes were obtained from hysterectomy and other gynecological procedures from fertile women between 35-53 years who had not undergone hormonal treatment for at least three months prior to surgery.</p> <p>The Brazilian team found that human fallopian tube are abundant in mesenchymal stem cells which have the potential of becoming a variety of cell types.</p> <p>The cells' chromosome complement showed no abnormalities, suggesting chromosomal stability.</p> <p>"In addition to providing an additional potential source for regenerative medicine, these findings might contribute to reproductive science as a whole," said Jazedje.</p> <p>"Moreover, the use of human tissue fragments that are usually discarded in surgical procedures does not pose ethical problems," Jazedje added. (ANI)</p> <p>The study appears in BioMed Central's open access Journal of Translational Medicine.</p>

Publication	wdel.com
Headline	Stem Cell research is getting a boost
Gist of the article	<p>Three local organizations are banding together in an effort to help Stem Cell Research. The initiative looks to have mothers donate umbilical cord blood for use in stem cell research.</p> <p>Wilmington's St Francis Hospital and the Community Blood Services are working with the Brady Kohn Foundation on this effort to treat life-threatening diseases.</p> <p>As part of this program all women giving birth at St Francis Hospital will be offered the opportunity to donate their baby's umbilical cord blood.</p>

Publication	news.bbc.co.uk
Headline	Hysterectomies a stem cell source
Gist of the article	<p>Discarded fallopian tubes from hysterectomies could be a good source of donor stem cells, say researchers.</p> <p>Work shows they are an abundant source of the immature cells that have the potential to become a variety of the body's tissues, like muscle and bone. The discovery offers another "ethical" route to creating stem cell treatments for diseases like arthritis without using embryos.</p> <p>The findings are published in The Journal of Translational Medicine.</p> <p>Experts have already shown that getting mesenchymal stem cells from umbilical cords, menstrual blood, teeth and fat tissue is viable.</p> <p>Discarded tissue</p> <p>The latest work by a Brazilian team from the University of São Paulo suggests fallopian tubes, discarded during the course of hysterectomies or female sterilisation operations, can be added to this list.</p> <p>Once harvested, the scientists were able to multiply and then coax the mesenchymal stem cells to turn into apparently healthy muscle, fat, cartilage and bone cell lines in the lab.</p> <p>This is another promising source to add to the list of so-called 'ethical' sources of stem cells</p> <p>Stem cell expert Stephen Minger</p> <p>Given that these adult stem cells are capable of replacing damaged cells in the fallopian tube, the researchers envisage the cells could be useful for understanding and treating fertility problems as well as providing a source of stem cells for regenerative medicine.</p> <p>However, it will still take more time and research before cells like these could be given to patients.</p> <p>Much of the work on stem cells has focused on those taken from embryos as they have an unlimited capacity to become any of the types of cells and tissue in the human body - a so-called pluripotent state.</p> <p>But campaigners have objected to their use on the grounds that it is unethical to destroy embryos in the name of science.</p> <p>Stem cell expert Stephen Minger, of Kings College London, said: "This is</p>

	<p>another promising source to add to the list of so-called 'ethical' sources of stem cells."</p> <p>But he pointed out that bone marrow and fat were more accessible less intrusive sources.</p> <p>Josephine Quintavalle of Comment on Reproductive Ethics said: "Obtaining multi-potent stem cells from discarded fallopian tubes is yet another example of the extraordinary potential of human waste tissue.</p> <p>"Hopefully these cells could also be used to repair damaged fallopian tubes, which are so often a major contributor to female infertility."</p>
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Publication	money.cnn.com
Headline	<u>Adult stem cells are a promising market</u>
Gist of the article	<p>When it comes to stem cells, the public -- and the media -- tend to focus on embryos. But researchers and analysts say marketable therapies already are emerging from less controversial work with adult stem cells.</p> <p>Adult cells make up the lion's share of the stem cell space, mainly because they are easier to come by than embryonic cells, and less expensive to run in clinical trials. They are also derived from mature tissue, like bone marrow or umbilical cord blood, so they avoid the ethical debate that surrounds embryonic stem cells.</p> <p>To be sure, many researchers consider embryonic stem cells to be more versatile, and they may someday be more useful than adult stem cells in treating diseases. But researchers also hope adult stem cells can help them combat a variety of maladies from diabetes to heart disease.</p> <p>In fact, adult stem cells are currently the only type of stem cells used in transplants to treat diseases, such as cancers like leukemia.</p> <p>Furthermore, researchers are far closer to commercializing drugs based on adult stem cells than any product based on embryonic stem cells.</p>