

Hair loss? Stem cells offer promising cure

It's been theorised for years, but now human stem cells have resulted in hair growth for the very first time.

"We have developed a method using human pluripotent stem cells to create new cells capable of initiating human hair growth. The method is a marked improvement over current methods that rely on transplanting existing hair follicles from one part of the head to another," said Alexey Terskikh, Ph.D., associate professor in the Development, Aging and Regeneration Program at Sanford-Burnham.

"Our stem cell method provides an unlimited source of cells from the patient for transplantation and isn't limited by the availability of existing hair follicles."

The process started with human pluripotent embryonic stem cells — that is, stem cells that are capable of developing into any other cell — which were then developed into neural crest cells. These are cells that can develop into a variety of cells on the head, including brain cells, cartilage, bone and muscle cells.

The researchers say that their research represents the first step towards a cell-based treatment for hair loss, which affects 40 million men and 21 million women in the United States.

"Our next step is to transplant human dermal papilla cells derived from human pluripotent stem cells back into human subjects," said Terskikh. "We are currently seeking partnerships to implement this final step."

Read full, original article: [Stem cell-grown hair could help those with hair loss](#)