



Parkinson's Disease and stem cells

FREE Guide



Parkinson's disease is caused when nerve cells degenerate and levels of dopamine are reduced. Dopamine is a chemical produced by nerve cells in the brain that sends signals to the part of the brain which controls movement. When there is insufficient dopamine movements can become jerky and uncontrolled.^[1] Parkinson's is a progressive condition which can impact considerably on the quality of life for sufferers.

While Parkinson's is not fatal, it can affect the life expectancy of sufferers. 1 in 20 people with Parkinson's disease are under the age of 40 when diagnosed.^[2] One study found that the earlier the onset of Parkinson's disease, the greater the reduction in life expectancy.^[3]

There are approximately 127,000 people in the UK with Parkinson's disease.^[4] Current treatments are symptomatic and while there is currently no cure, stem cell research could hold the key to finding one.

Parkinson's costs the UK £2 billion a year.^[5] Only 7% of costs accrued in the UK are

associated with direct medical care; the remaining 93% accounted for direct non-medical professional care and indirect informal care.

Accept

Read More

Parkinson's Disease Facts

- Every hour someone in the UK is told they have Parkinson's ^[7]
- The condition affects 1 in 500 people in the UK ^[7]
- Men are more likely to be affected than women ^[8]
- 18,250 people are diagnosed ever year ^[13]
- Most people diagnosed with Parkinson's disease are over the age of 60 ^[2]
- 145,000 people have Parkinson's in the UK. This is expected to rise to more than 168,000 by 2025 ^[9]

Parkinson's Disease and Stem Cells

Researchers in Japan have begun a clinical trial using induced pluripotent stem cells to treat Parkinson's by creating dopamine neurons. This will enable researchers to study the reason why cells degenerate and to test new drugs in human neurons for the first time. ^[10]

The reason cancer therapies have been able to progress so greatly is, in part, because researchers can take biopsies from human tumours and use those cells to design drugs. Stem cells have the potential to enable scientists to study neurodegenerative diseases, such as Parkinson's disease, comparatively. ^[10]

A study in China used mesenchymal stem cells from umbilical cord blood to treat Parkinson's disease. While the study was small it found that there was improvement in clinical symptoms and improved the quality of life to some extent. ^[11]

There are currently 22 clinical trials investigating the application of stem cells in Parkinson's disease, one trial is recruiting patient's to investigate the effect of autologous stem cells derived from the patients' own fat tissue. The study (NCT02184546) is expected to complete in July 2018. ^[12]

References

1. <http://www.webmd.com/parkinsons-disease/tc/parkinsons-disease-topic-overview>
2. <http://www.cafamily.org.uk/medical-information/conditions/p/parkinsons-disease/>
3. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2095626/>
4. <http://www.parkinsons.org.uk>

FREE Guide



This website uses cookies to improve your experience. We'll assume you're OK with this, but you can opt-out if you wish. http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_24-7-2013-16-9-13

Accept Read More

6. <http://www.ncbi.nlm.nih.gov/pubmed/21235405>
7. <http://www.parkinsons.org.uk>
8. <http://www.nhs.uk/conditions/parkinsons-disease/Pages/Introduction.aspx#>
9. <http://www.parkinsons.org.uk>
10. http://www.hopkinsmedicine.org/stem_cell_research/coaxing_cells/forging_ahead.html
11. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4628010/>
12. <https://clinicaltrials.gov/ct2/results?term=Parkinson%27s+stem+cell&Search=Search>
13. <https://www.parkinsons.org.uk/professionals/news/parkinsons-diagnoses-rise-uk>

The information contained in this article is for information purposes only and is not intended to replace the advice of a medical expert. If you have any concerns about your health we urge you to discuss them with your doctor.

FREE Guide



This website uses cookies to improve your experience. We'll assume you're OK with this, but you can opt-out if you wish.

Accept


Read More

Connect with us



FREE Guide



Cells4Life Group LLP,
Units 2-3 Oak House, Woodlands Office Park,
Albert Drive, Burgess Hill, RH15 9TN, UK.  [honest.simulates.racetrack](https://www.honest.simulates.racetrack)
+44 (0) 1444 873950
enquiry@cells4life.com

Useful Information

- [Sitemap](#)
- [Privacy Policy](#)
- [Terms & Conditions](#)
- [Cells4Life's Use of Cookies](#)

Scientific References

This website uses cookies to improve your experience. We'll assume you're OK with this, but you can opt-out if you wish.

[Accept](#) [Read More](#)

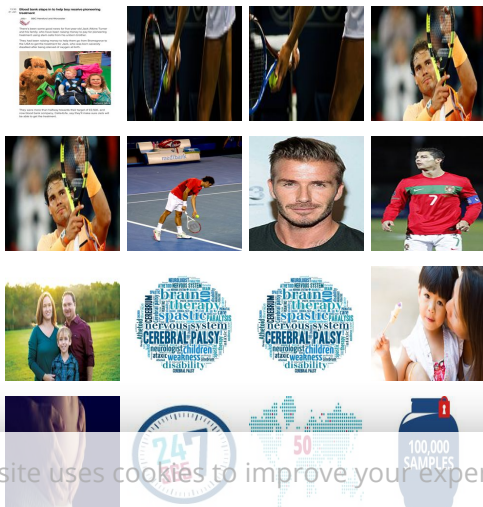
Cells4Life Blog Posts

- [Buying a Pregnancy Gift: Your Guide to Christmas Shopping](#)
December 11, 2018
- [10 Ways to Survive a Winter Pregnancy](#)
December 5, 2018
- [Lung cancer stem cell therapy established by NHS, UCL](#)
November 27, 2018
- [A cure for HIV? New cord blood cancer trial announced](#)
November 21, 2018
- [What is World Cord Blood Day? Everything you need to know](#)
November 13, 2018
- [How Cord Blood Transfusions can treat Krabbe Disease](#)
October 23, 2018

FREE Guide



Cells4Life Pinterest



This website uses cookies to improve your experience. We'll assume you're OK with this, but you can opt-out if you wish.

More Pins

Accept Read More

Our latest Tweets

- Great little segment on **@absoluteradio #BreakfastShow** this morning, as **@daveberry_tweet** talked about his experience... <https://t.co/8tEGWiUXkL>
18 days ago
- A new NHS trial at **@ucl** has been established to investigate the viability of lung cancer therapy using umbilical co... <https://t.co/4po4ZECvhr>
19 days ago
- RT **@just4_children**: **@just4_children** provides fundraising support to access **@Cells4Life** the Experts in Stem Cell Processing <https://t.co/c3p...>
19 days ago
- Cord blood could be the key to treating and curing blood **#cancer** and **#hiv** - find out more: <https://t.co/3ankedUwer>
26 days ago

FREE Guide



This website uses cookies to improve your experience. We'll assume you're OK with this, but you can opt-out if you wish.

[Accept](#)[Read More](#)