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In the news

STEM-CELL THERAPY FOR TYPE 1 DIABETES?

A study in *The Journal of the American Medical Association (JAMA)*, 11 April 2007) reports that a small group of patients with newly diagnosed type 1 diabetes no longer needed insulin injections following transfusion of their own stem cells.

15 young patients received high-dose immunosuppressive drugs followed by transplantation of haematopoietic stem cells. All patients, except one, became insulin independent for varying amounts of time following treatment. 11 of the patients involved in the trial discontinued injections with insulin immediately after the treatment and have not needed them since. Two other patients needed insulin injections, for varying periods of time after the treatment, but have not injected themselves in 1 and 5 months, respectively. One patient, who was insulin independent for 12 months, suffered a relapse following a viral infection and resumed daily insulin injections.

"The initial results have been good and show the importance of conducting more trials", said Dr Burt, of Northwestern University, Chicago, USA, and a co-author on the study (*The Times*, 11 April 2007).

The Juvenile Diabetes Research Foundation International stated that the results suggest that "the immune system of people with type 1 diabetes can be retrained or reset, at least for a period of time" (11 April 2007).

However, the timing of the treatment is crucial. "If you wait too long [after diagnosis]," according to Dr Burt, "you've exceeded the body's ability to repair itself." (*The New York Times*, 11 April 2007)

Dr Frame, of the charity Diabetes UK, urges caution. "We would wish to avoid false hope based on the very preliminary nature of these results". There are a number of issues that "need to be addressed through more research before there are any conclusive findings in this area." (*BBC News*, 11 April 2007)

Olive Leavy