Stem cell therapy can help reverse diabetes

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In this study, mice with type 1 diabetes were transfused with pre-treated blood stem cells to produce more proteins called PD-L1 that had a strong anti-inflammatory effect against diabetes. sugar removal type 1.

Treated stem cells can limit the cell's autoimmune response and reverse abnormal high blood sugar in mice.

Researchers said almost all mice were treated for short-term diabetes, while a third maintained normal blood sugar during the rest of its life.

Paolo Fiorina works at the Children's Hospital in Boston: "There is a change in the shape of the immune system when injecting these stem cells."

" *These blood stem cells have the ability to regulate immunity, but it seems that in mice and people with diabetes, there are certain differences in the capabilities of this cell* ."

" *We found that in diabetes, blood stem cells are defective, promote inflammation and can lead to the onset of the disease* ," Fiorina said.

The study is published in the journal Science Translational.

The team leader found that PD-L1 production had a certain change in blood stem cells from mice and people with diabetes.

When a pathogen gene is given to PD-L1 stem cells, these cells have been treated and reversed diabetes in mice.

Eliminating PD-L1 deficiency, using stem cell therapy with few side effects can provide a new treatment for the disease.

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