

'Miracle' therapy for MS sufferers helps paralysed to walk again

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Patients paralysed by multiple sclerosis have been able to walk again after being given a groundbreaking stem cell treatment.

Doctors at the Royal Hallamshire Hospital in Sheffield described the early results of a trial involving about 20 patients as "miraculous". The treatment uses chemotherapy to destroy the patient's immune system, which is rebuilt using stem cells harvested earlier from the patient's blood in a process called autologous haematopoietic stem cell transplant (HSCT).

Basil Sharrack, a neurologist at the hospital, said: "Some of the results we have seen have been miraculous. This is not a word I would use lightly, but we have seen profound neurological improvements."

The trial involves about 100 patients in the UK, the United States, Sweden and Brazil. More than 100,000 people in the UK have MS, which develops when the coating around nerve fibres is attacked by the immune system.

Steven Storey, a patient in the trial, told the BBC's *Panorama*: "I went from running marathons to needing 24-hour acute care. At one point I couldn't even hold a spoon."

Mr Storey lost the use of his legs and had even discussed with his young children the possibility that he might die. "I was unable to even flicker my toe," he said. "You could have stabbed me in the leg and I wouldn't have felt it."

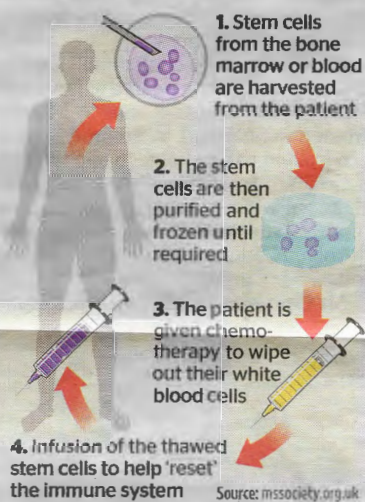
Within days of the transplant he could move his toes, and four months later he could stand without assistance. After ten months he completed a mile-long swim in the Lake District.

Although he still needs a wheelchair, Mr Storey said: "It's been incredible. I was in a dire place, but now I can swim and cycle and I am determined to walk."

A single course of new treatment, which doctors believe should give permanent results, costs £30,000. Existing treatments for MS can cost that amount every year.

Holly Drewry, 25, was 21 when she

How it works



was given a diagnosis of MS. Her condition deteriorated after she gave birth to her daughter, Isla, who is now two. "I didn't trust myself to carry her in case I had a fall," Ms Drewry said.

She needed a wheelchair before the transplant but walked out of the hospital. "It's been a miracle," she said. "I started seeing changes within days. I walked out of the hospital, walked into the house and cuddled Isla."

Two years later, Ms Drewry has suffered no relapses and there is no evidence on her scans of active disease.

John Snowden, a consultant haematologist at the Royal Hallamshire, said: "It's clear that we have made a big impact on patients' lives." However, he warned that trial subjects would have to be monitored for decades. "Time will tell whether it is a cure or not," he said.

Emma Gray, the head of clinical trials at the Multiple Sclerosis Society UK, said: "Treatments such as HSCT could offer hope, and it's clear that in the cases highlighted by *Panorama* they've had a life-changing impact." She cautioned, however, that the treatment was not effective for all types of MS and described it as "an aggressive treatment that comes with significant risks".