

Botox boost for cerebral palsy sufferers

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Botox injections can provide lasting help to children with cerebral palsy, scientists said today.

Research found the anti-wrinkle treatment enabled children to perform everyday tasks without struggling against involuntary muscle movements. In some cases they were able to feed themselves and write for the first time.

A total of 86 per cent of the children experienced notable improvements in their symptoms lasting four months or more. Celine Dion, Cher and Madonna are just some of the celebrities rumoured to have had botox treatment to maintain a youthful appearance.

Botox uses tiny amounts of botulinum toxin, derived from the bacteria that cause botulism food poisoning. The deadly nerve agent kills by paralysing the muscles used for breathing. Applied in carefully controlled doses to the face, it can smooth out wrinkles and banish frown lines.

But doctors are now finding a wide range of other uses for botulinum, such as treating paralysis after a stroke, migraine headaches, back pain, writer's cramp and muscle spasms.

A number of specialists are also pioneering the use of botox to help children and adolescents afflicted with cerebral palsy. The condition, triggered by damage to a child's developing brain, causes abnormal stiffness, odd postures and uncontrollable movements.

Scientists at the Walter Reed Army Medical Centre in Washington DC studied 250 children, aged one to 16, who received botox injections for cerebral palsy.

Dr Marc DiFazio, who led the research, said: "It's very exciting to see the progress these kids can make.

"Some of them are able to do more for themselves, like feeding themselves or turning on a faucet (tap). Some were able to hold a pen and write for the first time, or use a computer touch screen to communicate.

"These may not seem like big changes, but they can be life-changing for these kids and their families."

Dr DiFazio presented the findings last week at the American Academy of Neurology's annual meeting in Honolulu, Hawaii.

A total of 148 children were monitored for an average of more than two years. Of these, 92 per cent maintained their favourable response to the drug. Around 80 per cent of children

followed for more than two years continued to show improvement over their initial symptoms.

Side effects were mild and uncommon. Four children had a flu-like reaction, and one experienced weakness in the legs. None of the children developed resistance to botulinum after repeated use.

"It's great news for families of children with cerebral palsy that long-term botulinum toxin is safe," said Dr DiFazio.

A handful of cerebral palsy children have been treated with botox in Britain. Dr Tony Ward, a consultant in rehabilitation medicine who has pioneered the technique in the UK, said: "Botulinum works on the junctions between the muscles and the nerves.

"Previous drugs for spasticity were always different according to whether the cause was from the brain or the spinal cord, but you can use botulinum for either."

He said children with cerebral palsy sometimes had to undergo radical surgery to their tendons, muscles and bones.

"It's big surgery, it's expensive, and there are risks," he said. "The wonderful thing about botox treatment is that it's safe, reversible, and there are virtually no side effects."

A key factor was that calming symptoms gave therapists a better chance to manipulate and stretch a child's muscles, which could lead to permanent improvement.

It also meant that unavoidable surgery could be delayed until a child was older, making a successful outcome more likely.

Dr Ward, director of the North Staffordshire Rehabilitation Centre in Stoke-on-Trent, said he had seen dramatic results after treating children of about 12 or 13 with botox. "We've managed to keep people walking who would otherwise have ended up in wheelchairs," he said.