

**Journalist:** This is Sheila Roy at a time when she'd almost given up hope...

**Doctor:** Are you able to stand up like that?

**Journalist:** Filmed before having gene therapy, a severe tremor and lack of balance made simple tasks impossible. She felt trapped in a Jeckyll and Hyde state by Parkinson's.

Less than a year after having this groundbreaking new treatment injected deep into her brain life is looking up.

**Sheila:** People would take knives off for me in the kitchen, I was everywhere with a knife. My vocal cords would suddenly shut, I can't breathe. If I hit a wall or people then I can't function, I just stop. I feel I can see a glimmer of the person I used to be now, which is really exciting.

**Journalist:** Sheila was diagnosed in her forties and has had the disease for 17 years. It occurs when the brain gradually stops producing the nerve-controlling chemical dopamine. So this new treatment called *ProSavin* uses a stripped down virus to transport dopamine making genes into the brain. Holes are drilled into the skull and it's injected deep into the region called the striatum that helps control movements. Once the virus gets into the brain cells it reprograms them to gradually produce their own dopamine, in essence creating a medicine factory inside the patient's head.

**Doctor 1:** It seems to be having an overall beneficial effect in smoothing out people's days, probably allowing a slight dose reduction in medication, and for some patients a better sleep pattern and a better quality of life overall.

**Journalist:** This very small container gives you some idea of the tiny amounts of liquid that were injected into Sheila's head. She doesn't need any more operations but will need further checks and scans to try and work out just how much dopamine her brain is now producing. They'll also be looking for any side effects. Safety is of course vital if this kind of treatment is to have a future.

So far it's only been carried out on 15 patients here in Cambridge and in France. The scientists from Oxford are already working on similar treatments for other degenerative illnesses.

**Doctor 2:** Instead of popping a lot of tablets the idea of a single shot therapy isn't something that hasn't been ever experienced before in medicine, so I think this is a wonderful opportunity to really completely change the face of the, the physicians' armour in a way.

**Journalist:** More clinical trials are needed before it could be available on the NHS, and this isn't a cure.

**Sheila:** If you can treat the symptoms and control in some way the deterioration in what you can do, it has to be better for you, and it is.

**Journalist:** So while Sheila still has her bad days she's convinced that it's been a life changer.

**Skynews.**