

## Lost your head? Sorry, you can't get a new one anytime soon

Last month, Italian neurosurgeon Sergio Canavero made waves when he announced he'd discovered the key to performing a totally crazy surgery: transplanting a whole head onto a new body.

Canavero said he'd devised a way to fuse a severed head, presumably from someone with a life-threatening illness, onto a body donated by a brain-dead patient. He claims to already have patients lined up to test the treatment, which he estimates will be feasible within two years, according to the cover story of this week's *New Scientist*.

But other experts are skeptical. "There's no way he's going to hook up somebody's brain to someone's spinal cord and have them be functional," Dr. Chad Gordon, professor of plastic and reconstructive surgery and neurological surgery at Johns Hopkins University, told BuzzFeed News.

"On the conservative side, we're about 100 years away from being able to figure this out," Gordon said. "If he's saying two, and he's promising a living, breathing, talking, moving human being? He's lying."

In a paper published this month describing this hypothetical procedure, Canavero describes attaching the head to the donor body. The donor would have to be a brain-dead, living patient who had previously promised their body to science. Alongside the patient in the same surgical room, the donor would have his or her head decapitated, and the remaining body would then need to be fused to the recipient's head.

Canavero suggests doing that with a compound called polyethylene glycol, which has been shown to promote nerve growth in the spinal cord and could be used as a sort of glue between the body and the head.

But "once you sever the spinal cord, there's a series of things that prevent it from healing. A fancy glue is not going to fix that," Winfree said. There's a veritable obstacle course preventing its growth: Certain nerve cells will immediately form scars that will act as physical barriers to the two sides of the spinal cord connecting; other proteins and enzymes will be inhibiting their growth as well.

**Read full, original article:** [No, Head Transplants Are Definitely Not Going To Happen](#)