

A check up from the neck up

The Independent



Am I wrong to find even discussing the possibility of a head transplant wrong?

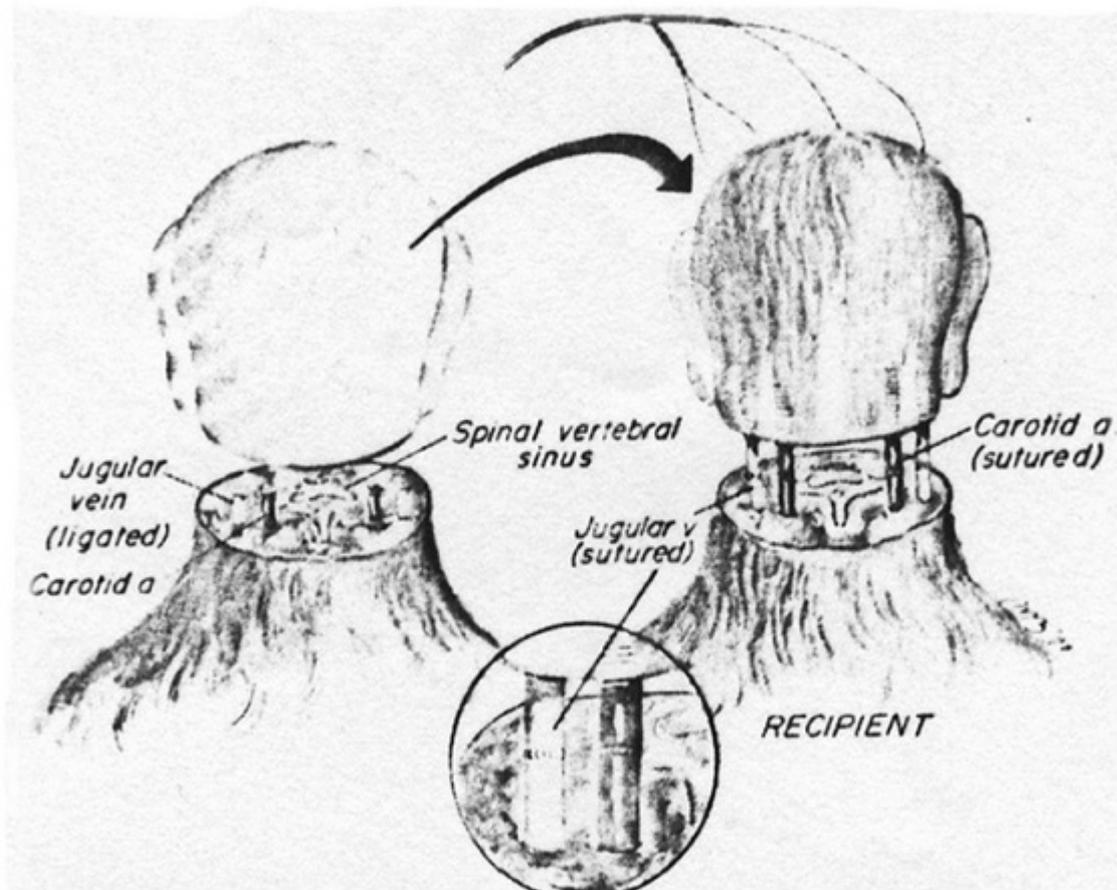
Had it been April the 1st I would have been convinced that The Independent was pulling my pisser.

Moreover, why did the film ['Never let me go'](#) immediately spring to mind when I saw the headline.

Some things are best left well alone. This is one of them as far as I'm concerned.

Human head transplants a 'feasible enterprise' says Italian neurosurgeon Dr Sergio Canavero

Doctor claims research on the complicated surgery could see results in just two years



A drawing depicting the first total cephalosomatic exchange in a monkey (from White et al. 1971)

Human head transplants could now be possible using currently available medical techniques, according to an Italian neurosurgeon who thinks he has worked out how it could be done.

In a project proposal published by the medical journal *Surgical Neurology International*, Dr Sergio Canavero outlines his method for the "Head Anastomosis Venture" – or HEAVEN.

The procedure would involve severing the heads of two human patients simultaneously using an "ultra-sharp blade", cooling and flushing out the "recipient" head before attaching its new body with an advanced polymer "glue".

Dr Canavero suggests that the realigning of head and body could also be achieved using "electrofusion", in an approach not entirely unlike that of Mary Shelley's Dr Frankenstein.

But the Italian, who works for the Turin Advanced Neuromodulation Group and has previously published research on whole-eye transplants, says that his project is no fiction, and bases it on a similar experiment on Rhesus monkeys in the 1970s in which the patient survived for eight days.

A few years after this first test 40 years ago, its protagonist Dr Robert White noted that: "What has been accomplished in the animal model – prolonged hypothermic preservation and cephalic transplantation, is fully accomplishable in the human sphere."

In laying out what he says is "the groundwork for the first successful human head transplant", Dr Canavero admits that his polymer gel reattachment method (known as GEMINI) would not be perfect. But he notes that: "as little as 10 per cent of descending spinal tracts are sufficient for some voluntary control of locomotion in man."

He says that full and open research on the topic could bear fruit in just two years, and that the first patient should be someone young, with a fully-functioning brain, but suffering from "progressive muscular dystrophies or even several genetic and metabolic disorders".

Dr Canavero concludes by saying "body image and identity issues will need to be addressed, as the patient gets used to seeing and using the new body".

He said: "HEAVEN appears to have grown into a feasible enterprise early in the 21st century," but added that he has not considered the ethical implications of his proposal.