## Head Transplant

A recent medical article released by *Medical News Today* alludes to the possibility of the first successful human head transplantation surgery. This project, code-named HEAVEN/GEMINI, is being spearheaded by prominent neurosurgeon, Dr. Sergio Canavero. Although head transplantation surgery has been attempted in the past on primates, the attempts proved futile as the doctors were unable to reconnect the spinal cord to the new head. However, according to Dr. Canavero, forming spinal linkage will no longer be an issue due to advances in surgical technology: "the greatest technical hurdle to such endeavor is of course the reconnection of the donor's and recipient's spinal cords. It is my contention that the technology only now exists for such linkage."<sup>1</sup>

The surgery would include inducing hypothermia in both the donor and recipient and severing the spinal cord precisely so that it would be possible to fuse it with the donor body's spinal cord.<sup>2</sup> "As the human brain can only survive without oxygen for one hour, the surgeons would have to remove both heads and connect the recipient's head to the circulatory system of the donor body within this time frame."<sup>3</sup> According to Canavero, prime candidates for this type of transplantation would be brain-dead patients and those with advanced cancer.

Not everyone is excited about this medical advancement. Given that the cost of a head transplant would be approximately \$13 million, only wealthy individuals could afford it. Moreover, some worry that older, wealthy members of our society might pay vulnerable young people for their bodies. Some even worry that humans may be farmed for their bodies.<sup>4</sup>

## **Study Questions:**

- 1. Is head transplantation morally permissible?
- 2. Should we legalize medical procedures that have the potential to create exploitive conditions for vulnerable members of society?

<sup>&</sup>lt;sup>3</sup>http://www.medicalnewstoday.com/articles/262948.php <sup>4</sup>http://www.huffingtonpost.com/2013/07/06/head-transplant-italian-neuroscientist n 3533391.html



<sup>&</sup>lt;sup>1</sup>http://www.medicalnewstoday.com/articles/262948.php <sup>2</sup>http://abcnews.go.com/blogs/health/2013/07/02/human-head-transplants-could-become-reality/