

A 10-year-old boy has undergone pioneering surgery in which his own body worked as a "bioreactor" to help a donated windpipe, seeded with his own stem cells, grow into a fully functioning organ.

The boy, who is British, is the first child in the world to undergo the revolutionary transplantation. The development takes transplant surgery a step closer to the goal of replacing damaged or worn-out organs with functioning replacements that are not rejected by the body, which are in increasing demand as life expectancy grows.

It also opens up the prospect of treating damaged organs with stem cells to stimulate self-repair, potentially avoiding the need for a transplant.

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