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The world's first successful transplant of a synthetic windpipe was announced Thursday.

The operation was performed a month ago on a 36-year-old cancer patient who had been suffering from late stage tracheal cancer. The windpipe was created from scratch. [BBC has details.](#)

BBC's Fergus Walsh reports -- **"The synthetic windpipe was based in the solution of stem cells taken from the patients bone marrow. After merely two days, the millions of tiny holes in its surface were ceded by cells. A synthetic body part had become the patient own."**

Professor PAOLO MACCHIARINI (Transplant surgeon) -- **"It doesn't rely at all on human donation. You can have it immediately. There's no delay and most importantly since its a regenerative approach, you don't need immune suppression."**

The patient will be discharged Friday. His speedy recovery marks another milestone in the quest to make fresh body parts for transplantation and offers a possible treatment option for thousands of patients who suffer from diseases affecting the windpipe.

Alan Russell, director of the McGowan Institute for Regenerative Medicine in Pittsburgh tells [Washington Street Journal.](#)

"It's yet another demonstration that what was once considered hype [in the field of tissue engineering] is becoming a life-changing moment for patients."

The patient, Andemariam Teklesenbet Beyene of Eritrea, had a tumor growing in his windpipe too large to remove. He couldn't wait for a donated organ.

[David Green, president of Harvard Bioscience Inc.](#) where the synthetic windpipe was created, said the initiative was done essentially on an emergency basis and more formal trials are necessary.

Green -- **"The application may help children, who lack as many donated organs as adults. The next patient who will receive a similar procedure is a 9-month-old girl, who was born without a trachea."**

Despite the optimistic view towards the future of synthetic organs, [CNN says this is only a baby step.](#)

"You know, the dream vision is one day we won't have to wait for cadavers' organs. We'll be able to just make a kidney, make a liver in the lab. This is a baby, baby, baby step in that direction... Remember a windpipe is a very basic structure. It's not like a heart that has vows and different pats or what not. So maybe in time they would do this in more organs and that would be an incredible day."

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