

Medical Breakthrough 2016: Chinese Doctor Grows New Ear Out Of Rib Cartilage On Man's Arm For Better Hearing

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Chinese doctors have found an unconventional way to restore a patient's hearing: they grew a new ear on his forearm. In a breakthrough procedure, doctors took rib cartilage from a patient, identified as "Mr. Ji," and transported it to his arm after a horrific car accident left him without a right ear. The surgery will help Mr. Ji, who is in his late thirties, to "feel complete," he said.

The ear transplant is just one of several extensive surgeries Mr. Ji has undergone after the whole right side of his face was torn off, including surgery to restore facial skin to his cheeks, but he still felt uncomfortable missing one of his ears.

"I lost one ear. I have always felt that I am not complete" the man told the Chinese site [Huanqiu](#).

Mr. Ji's fate is in the hands of renowned Chinese surgeon Guo Shuzhong, of First Affiliated Hospital, who performed China's first face transplant operation in 2006, according to [China Daily](#). During the surgery, Shuzhong cut rib cartilage into the shape of an ear, and placed it underneath a flap of skin on the patient's arm for it to grow. The transplant involved the following three stages:

Stage 1: Place a skin expander on the patient's arm to make space for the ear by injecting water inside to increase volume.

Stage 2: Build the ear and insert it into the new space.

Stage 3: Transplant the ear onto the patient's head in about three to four months when the artificial organ is fully grown.

The most difficult part of the procedure is the second stage — inserting the ear into the patient's forearm, Shuzhong told [China Daily](#).

Mr. Ji is excited about having the ability to hear better, and getting his ear back. He looked at his ear, and joked, "It looks exactly the same as my old ear."

Artificial ear grown on patient's arm to replace ear lost in traffic accident in China's Xi'an

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The concept of ears growing on forearms isn't entirely novel. In 2015, Stelarc, the award-winning Australian performance artist, has grown a third ear in his arm for art's sake. The ear was first constructed using a frame made out of biocompatible material, which is commonly used in plastic surgery. Once it was transported into his arm, Stelarc's own tissue and blood vessels infiltrated the material, and the ear is now a living, feeling, functioning part of his body, [CNN](#) reported. The Australian artist wants to pursue further surgeries to install a Wi-Fi connected microphone to allow people anywhere in the world to listen to what he hears.

It seems growing ears is no longer just limited to the head.