

3D printing helps treat young heart disease patients

Ma Chengqiang, 16, and 8-month-old Yang Youhong from northwest China's Qinghai Province have both undergone life-saving heart surgery in Shanghai thanks to 3D printing advances.

"Our children have had the world's latest 3D printing technology heart surgery. We are so lucky," said Ma Wenming, grandfather of Ma Chengqiang. "Moreover, the fees including transportation, accommodation, diagnosis and treatment are all free. We are really grateful."

The two children are among the beneficiaries of a China-Belgium charity project, launched in April by Shanghai Children's Medical Center and Belgium's Materialise NV, one of the largest 3D printing software and services providers in the world.

The project provides free treatment, especially with the 3D printing technology, for children diagnosed with congenital heart disease from underdeveloped regions in western China, said Ji Qingying, deputy head of the medical center.

Each year, Shanghai Children's Medical Center conducts more than 3,700 heart operations on children across the country, ranking first in the world's medical institutions. Heart surgery would normally cost a family 80,000 to 100,000 yuan (11,600 to 145,00 U.S. dollars).

The project plans to do 15 to 20 heart surgeries every year using 3D printed devices.