Toddler is youngest to ever get lab-made windpipe

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CHICAGO (AP) - A 2-year-old girl born without a windpipe has a new one now grown from her own stem cells, the youngest patient in the world to benefit from the experimental treatment.

Hannah Warren, 2, poses with her parents Tuesday, April 30, 2013, at Children's Hospital of Illinois in Peoria, Ill. She is the first patient in the world to benefit from the experimental treatment. Hannah was born without a windpipe and her doctors in South Korea expected her to die, but doctors in Illinois said she has a 90 percent chance of survival. She had the operation in November 2011 to treat late-stage cancer of the esophagus. She developed an infection after the procedure.

Hannah's parents had read about Dr. Paolo Macchiarini's success using stem-cell-based tissues but couldn't afford to pay for the operation at his center, the Karolinska Institute in Stockholm. So Dr. Mark Holterman helped the family arrange to have the procedure at his Peoria hospital, bringing Macchiarini to US in March to perform the operation.

Hannah had breathing difficulties at birth and Korean doctors soon discovered the missing windpipe. They configured a windpipe using tissue grown from her own stem cells, the youngest patient in the world to benefit from the experimentative treatment.

"It's going to be amazing for us to finally be together as a family of four," he said. The couple has an older daughter.

Only about 1 in 50,000 children are born with the windpipe defect. The stem-cell technique has been used to make other body parts besides windpipes andholds promise for treating other birth defects and childhood diseases, her doctors said.

The operation brought together an Italian surgeon based in Sweden who pioneered the technique, a pediatric surgeon at Children's Hospital of Illinois in Peoria, Illinois who met Hannah for the first time in South Korea, and Hannah - to a New York born and Korean woman who had the operation in November 2011 to treat late-stage cancer of the esophagus. She developed an infection after the operation but now is acting like a healthy 2-year-old, her doctors said.

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