

# INTO the HEARTLAND CAMPAIGN

**SITE: CHELYABINSK  
DISTRICT: URALS  
COLLABORATION LAUNCHED: 2015**

**JULY 20 – 30, 2016  
SURGICAL-EDUCATIONAL  
MISSION 2**



## THE HOUSEHOLD AND THE FAMILY

Curious Baby Margarita lifts her head to look at each cardiologist as they perform an echocardiogram on her. As the doctors talk, she makes sounds, her way of participating in the conversation. Her skin has a bluish tint – a classic sign of cyanosis caused by heart disease. She is five months old and small for her age, weighing less than 12 lbs. Despite her size, she is active, lively, and has a sunny disposition. Her mother, Irina, is in her twenties, and also exhibits a positive attitude. Margarita is the family's first child. They live in Chelyabinsk, close to the Chelyabinsk Federal Cardiac Center (CFCC), where they have been coming since Margarita's birth. Irina says Margarita seems totally normal to her – active and engaged with the world around her, just like any other baby.

## CHILD'S DEVELOPMENT AND MEDICAL HISTORY

Irina attended regular prenatal screening exams where Margarita's heart defect was first detected. The family was referred to a local perinatal center, where they were given advice on what to expect. Irina and her husband consulted with many doctors to make sure the diagnosis was accurate and to confirm that their baby's heart defect would be treatable. They were told that their child would be operable and could have a normal life.

The day after Margarita was born, she was transferred from the maternity hospital's neonatal intensive care unit to the CFCC. Upon examination, she was officially diagnosed with pulmonary atresia with intact ventricular septum and right ventricular hypoplasia: much of the right side of her heart did not develop in utero. On her second day of life Margarita had her first surgery, a Blalock-Thomas-Taussig shunt – a palliative operation to increase blood flow to her lungs for oxygenation. When the Heart to Heart team arrived in Chelyabinsk five months later, Margarita was readmitted to be considered as a surgical candidate for her second staged operation.

## CURRENT CONDITION

Heart to Heart pediatric cardiologist Nathan Taggart (Mayo Clinic, Rochester, MN) examined Margarita on our first day on the ground in Chelyabinsk. At our case conference a few days later, she was selected by the joint Heart to Heart-Chelyabinsk team for surgery. Dr. Taggart then performed a diagnostic catheterization to confirm that she was ready for her open heart repair. The next day, the joint team performed a Glenn procedure on her.

Margarita spent one day recovering in the PCICU before she was discharged to the pediatric ward. She was alert and active, though a bit agitated. At the end of our surgical-educational mission, we found Margarita sleeping soundly in her mother's room. Before she starts kindergarten, Margarita will require a third surgery – the Fontan operation. Until then, cardiologists will monitor her to ensure that she receives timely treatment.

## PATIENT PROFILE

Child	Margarita B.
Age	5 months old
DOB	February 16, 2016
Weight	Birth: 5 lbs 2 oz Current: 11 lbs 14 oz
Home	Chelyabinsk
Diagnosis	Pulmonary atresia, intact ventricular septum; hypoplastic right heart syndrome; s/p: BTT shunt (2016, Chelyabinsk)
Open heart surgery	Bidirectional Glenn; takedown of BTT shunt July 26, 2016
Discharged from PCICU	July 27, 2016
Discharged from hospital	August 5, 2016

*Based on an interview conducted in Russian by Albina Popova, Heart to Heart staff.*