

SAVING FACE

WHEN THE PARENTS OF A 14-MONTH-OLD GIRL TRAVELED ALL THE WAY FROM CHINA TO MEET WITH PETER CARMEL, MD, CHAIRMAN OF THE DEPARTMENT OF NEUROLOGICAL SURGERY, AND FRANK CIMINELLO, MD, A PLASTIC SURGEON AND DIRECTOR OF CRANIOFACIAL SURGERY AT NEW JERSEY MEDICAL SCHOOL, THEY WERE VERY CONCERNED ABOUT HOW THEIR LITTLE GIRL LOOKED.



right to left:

Frank Ciminello, MD, a plastic surgeon and Director of Craniofacial Surgery at New Jersey Medical School

Peter Carmel, MD, Chairman of the Department of Neurological Surgery

Craniosynostosis, the premature fusing of bone plates in the skull, had caused the girl's skull to become misshapen taking on a triangular shape.

"If the condition is left unrepaired before their first birthday, children could have cognitive defects," Ciminello said. "The skull is not expanding. The brain wants to grow but it can't. It's like being in a locked case." At 14 months, the toddler was "right on the cusp," intensifying her need for craniofacial surgery to correct the deformity of her skull.

Although her condition was diagnosed shortly after birth, her parents couldn't find a surgeon in China to perform the operation. Her mother is Chinese; her father African American. They traveled to the United States to search for a surgeon. After visiting a number of Craniofacial centers across the country they settled the care of their daughter on the UMDNJ Craniofacial Team.

"Craniofacial surgery is a relatively new field and there are a very small group of surgeons who perform this type of surgery," Ciminello said.

Craniofacial surgery, pioneered by French plastic surgeon Dr. Paul Tessier, is a combination of plastic surgery, cranio-orbital, and maxillofacial surgery. Although Dr. Tessier, dubbed the father of craniofacial surgery, had hundreds of doctors observe him operate in France, he trained a small handful of plastic surgeons in the United States, where he passed on the procedures and principles he developed. Included in this elite group was S. Anthony Wolfe, MD, who Ciminello trained under at the Miami Children's Hospital during his Craniofacial/Pediatric Plastic Surgery Fellowship.

In August, Ciminello and Carmel, performed the five-hour surgery that changed this little girl's life forever. The surgery required dozens of hours of preparation and a team of doctors, including anesthesiologists, radiologists, hearing specialists and counselors. "Children with this condition have a multitude of issues requiring a comprehensive and skilled team to address their many needs," he said.

During the surgery, Ciminello along with Carmel removed the front part of her skull including the top half of her orbital bones above the eyes. In addition, the back half of the skull was reshaped as were the frontal bones which were removed. At the completion of the reconstruction her skull and eyes had been restored to a more normal shape removing the stigmata which plagues the deformity.

"Craniosynostosis is very challenging because it has to be thought about fourth dimensionally. Everything you do has to be in anticipation for how the child will grow," Ciminello said. "That could mean over compensating for some facial features, while under compensating for others."

The toddler's family stayed in the U.S. for 16 weeks during the acute phase of her healing, Ciminello said. They have since returned to China where, thanks to Ciminello and Carmel, the girl is beautiful inside and out.

Cases like this one are the whole reason Ciminello got turned on to pediatric plastic surgery. While attending New York Medical College, Ciminello said he thought he wanted

to be a heart surgeon. Then, he went to a symposium given by three doctors who had just returned from a medical mission abroad. He saw photos of people's disfigurements — some rather extreme — that had been corrected through plastic and reconstructive surgery. He realized then the tremendous impact plastic surgeons can make.

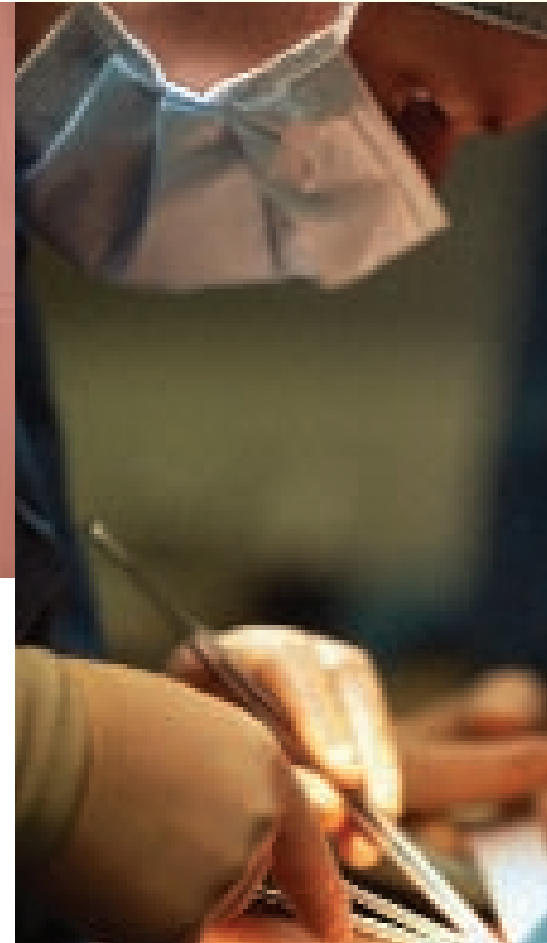
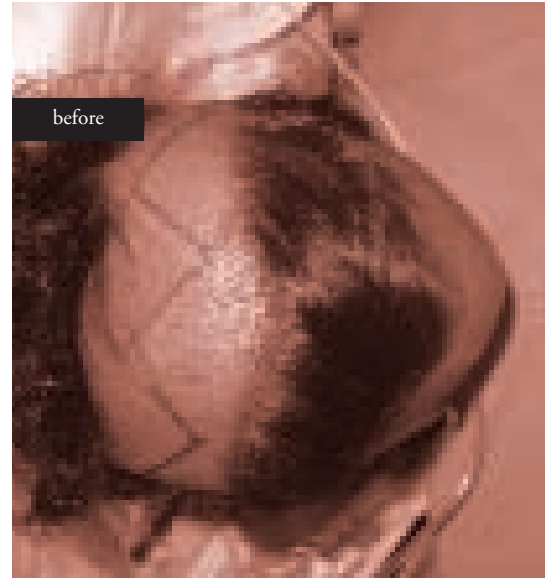
"It is very gratifying to perform this type of surgery both on a personal and professional level. Technically, it is very challenging requiring manipulation of the facial skeleton inside and outside of where the brain sits which keeps you on your toes. But more importantly the potential impact you can have on a child and their family is unexplainable."

During his own medical missions overseas — most recently to South Africa, he and his team examined over 100 patients and performed 23 operations. "Although I am grateful for each and every patient that I am privileged to care for here in the U.S., I am always awestruck by the lengths some people will go in the care of their loved ones. Some of the families that we take care of during these overseas trips will walk for days barefoot and with little food to have their child evaluated. It is humbling that they would in-trust the thing they value most to me."

In some cultures a cleft lip can be a social stigmata that prevents a person from attending school, marrying, or holding a job, he said. Ciminello said it's a condition he can correct in under an hour with surgery. The results can be life-altering.

He performed a cleft lip repair on a 45-year-old Colombian man who was a recluse, living with his mother, unmarried and trapped in his home secondary to his perceived deformity. A year and a half after his surgery, the man has a job and now is an active member of his community. "He has this second life," Ciminello said.

"You can free someone of their disease and allow them to live up to the full potential without disfigurement. With a child, the impact is a million times more significant. A child's potential is absolutely limitless," Ciminello said. ■



Although Isabella's condition was diagnosed shortly after birth, her parents couldn't find a surgeon in China to perform the operation. Isabella's mother is Chinese; her father African American. They traveled to the United States to search for a surgeon. After visiting a number of Craniofacial centers across the country they settled the care of their daughter on the UMDNJ Craniofacial Team.

top left:

Cbdgdte a was eehgtdt a
wwhwey they euyt a rgrt
ehya agre wthearst asgs yee
ieo cbdgdte a was eehgtdt
atheu a sjsue

top right:

Cbdgdte a was eehgtdt a
wwhwey they euyt a rgrt
ehya agre wthearst asgs yee
ieo cbdgdte a was eehgtdt
atheu a sjsue