

New tools for treating cleft lips and palates

by Helen Jung, The Oregonian

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Exhausted after seven hours of labor, Michelle Fanucchi waited eagerly to hold her baby boy, Angelo.

But even the warning from her doctor didn't prepare her for what she saw. One of Angelo's eyes was almost pinched shut. A nostril lay flat against his face. And a huge gap opened up where Angelo's upper gumline and lip should have been.



Courtesy of Michelle Fanucchi Angelo, at birth

Angelo had been born with a cleft lip and palate that had gone undetected in all five ultrasounds.

It was a shock, she said, and understandably, "it was difficult to look at him." She and her husband had not pictured this, had not imagined that their son would be the one in 750. But the Fanucchis had two things going for them, she said -- good health insurance and the recent arrival of [Dr. Judah Garfinkle](#) in Portland. Garfinkle, who grew up in Oregon, returned to Portland a year ago to serve as [Oregon Health and Science University's](#) director of craniofacial orthodontics and to practice with his father, an orthodontist in Portland for more than 30 years.

Garfinkle, a University of Oregon grad, earned his Doctor of Dental Medicine from Harvard University and spent time in Bolivia, helping treat children with cleft lips and palates. He and his wife, Alison, then moved to Kentucky where he earned his master's of science and certificate in orthodontics, then to New York for a craniofacial orthodontic fellowship at New York University Medical School. There he studied a still-uncommon technique for treating cleft lips and cleft palates from the two men who developed it.

Courtesy of Michelle Fanucchi Angelo at about 3.5 months, with the NAM plate

The technique, called Nasoalveolar Molding, or NAM, is a non-surgical method of coaxing the upper gum pad and nose towards proper alignment while a newborn's cartilage is still malleable.



The procedure includes special tape and a molding plate (like an orthodontic retainer) made of acrylic that essentially pressures the gum pads and nose into the correct position. A stent made of stainless steel wire and acrylic pushes up the nose, which can get flattened from the cleft. The molding plate requires painstaking recasting by Dr. Garfinkle every week or two.

"It is an art project," he said, though he amended it's "not one that I can put on a wall and someone would want."

But NAM, which takes place in the first few months of the baby's life, can help narrow the gap considerably. It positions the gum pads closer to its proper spot and can help stretch the skin underneath the nose and above the lip. The result is less work needed by surgeons to achieve better results.

"It takes the (golf) ball and puts it one foot away from the cup instead of leaving them a 22 foot putt," he said.



Courtesy of Michelle FanucchiAngelo at about 3.5 months, just before his surgery in December.

There's still a string of operations ahead for a cleft lip or palate child, from infancy through the teenage years, said [Dr. Anna Kuang](#), OHSU's director of craniofacial surgery. They include palate repairs, insertion of ear tubes to drain fluid (a build-up affects the child's ability to hear and, as a result, speak), operations on the gumline, nose and jaw. And OHSU experts provide other care for related problems stemming from cleft lips and palates.

OHSU has already used NAM on 21 babies, whose families would have had to take them to Seattle in the past, before Dr. Garfinkle's arrival.

It's time-consuming and expensive, and some insurers don't cover the costs of the procedure leaving either families or OHSU with some of the expense. But the results are too compelling to ignore, Drs. Kuang and Garfinkle said. For Angelo, the progress since he was born on Aug. 15, 2007, has just been "amazing," said Michelle Fanucchi. The gap in his gumline went from 10 mm to 1 to 2 mm in a little more than three months.

A recent picture of Angelo, who is now 13 months.

"You go through all these emotions -- sadness, anger, (you wonder) what did I do wrong," said Fanucchi, who added that she spent time mourning what happened and that she would not be able to nurse her son. But,



these days, people can't tell that her 13-month-old son was born with cleft lip and palate.

"In the end, you have met lots of wonderful people and so many people out there willing to help and work with you," she said.

Fanucchi keeps a page where she tracks Angelo's progress at www.carepages.com (registration required). You can find her son's page by entering angelofanucchi.

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