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- *Christine Zeindler*

Thomas was born with a cleft lip and a nose that was partially collapsed. Although his family found out about the birth defect a few days before his birth, when they held him and saw his face, they realized how serious his condition was. “His lips didn’t meet, his gums were particularly crooked and misaligned and his nose was falling down on one side. I knew this condition wasn’t life threatening, but thought my son would need an enormous number of surgeries,” says Isabelle Billard, Thomas’ mother.

Thankfully, Ms. Billard’s worries were not justified. New innovative procedures performed at the Montreal Children’s Hospital (MCH) of the McGill University Health Centre (MUHC) are giving children with cleft lips and palates reason to smile. This non-invasive intervention, called nasopalveolar molding (NAM) reshapes the gums, lips and nostrils, prior to surgery, resulting in near perfect features and less surgeries.

“By using NAM, we improve the aesthetic results because we align and balance the features,” says MCH pediatric orthodontist Dr. Broula Jamal. “This technique takes advantage of the malleability of the immature cartilage to make the nose as symmetric as possible and to raise the collapsed nostrils. It also helps stretch the soft tissues, like the lips, so the surgeon can close them without any tension and thus reduce the scarring.

“I had never heard about this procedure before,” says Ms. Billard. “Although I was nervous, I was encouraged by the thought of reducing the number of surgeries.”

At five weeks of age, Thomas was fitted a custom-made molding plate similar to an orthodontic retainer. The device, which was attached to his face with small rubber bands, was worn 24-hours a-day. Each week, small adjustments were made by Dr. Jamal until the gap between the gums was small enough to attach a small post to the appliance. This post was then inserted into the nostril and slowly adjusted to lift the nose and open it.

“I saw improvements in the first week. I could see how his lip was growing in the right direction. It was very powerful to see the progressive improvement,” says Ms. Billard.

Once the lips were almost closed and the nose straightened, MCH plastic surgeon Dr. Mirko Gilardino took over. After a single surgery, Thomas’ lips are completely closed, his gums are aligned and you can balance a pencil on the end of his nose.

“We are seeing better end-results,” says Dr. Gilardino referring to the NAM procedure. “We need to do less significant revisional procedures – the lips don’t need much work and usually the nose requires only minor revisions.”

“Thomas didn’t complain while wearing the appliance and the I know the NAM made a huge difference,” says Ms. Billard.

At 11-months Thomas smiles frequently, and so does his mother. “This was an effort, but it was well worth it.”

For more information about the Cleft Palate Clinic please call: 514-412-4400 x22517. To watch a recent TVA news report about the NAM go to: [www.tvanouvelles.ca/lcn/infos/regional/archives/2011/02/20110212-160058.html](http://www.tvanouvelles.ca/lcn/infos/regional/archives/2011/02/20110212-160058.html) [1]

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