Study shows variation in rates of secondary cleft lip and palate surgery

10 July 2015

For children with cleft lip and palate, the chances of undergoing secondary surgery vary depending on the center where they're treated, reports a study in *Plastic and Reconstructive Surgery—Global Open*, the official open-access medical journal of the American Society of Plastic Surgeons (ASPS).

When secondary surgeries are performed, they don't necessarily improve the child's final facial appearance, according to the new research by ASPS Member Surgeon Dr. Thomas J. Sitzman of Cincinnati Children's Hospital Medical Center and colleagues.

Secondary Cleft Lip and Palate Surgery—Variation and Outcomes

The researchers analyzed 130 children undergoing surgery to repair cleft lip and cleft palate at four specialized centers. The patients were part of the "Americleft" study, designed to compare surgical outcomes across North American cleft palate centers. All patients had cleft lip/cleft palate as their only abnormality, unrelated to any congenital syndrome.

Rates of secondary surgeries—additional procedures performed on the lip, palate, and/or nose after the initial (primary) surgery—were compared across the study centers. Most patients were followed up through adolescence.

The results showed significant variation in rates of secondary lip surgery and secondary nasal surgery (rhinoplasty) at the four cleft palate centers. Through ten years, the estimated rate of secondary lip surgery by center ranged from five percent to 60 percent. There was also substantial variation in rates of secondary rhinoplasty—from 47 to 79 percent by age 20 years.

Overall, the risk of secondary lip surgery varied 12-fold across centers, while the risk of secondary rhinoplasty varied six-fold. There was no significant variation in secondary palate surgery.

Surgeon ratings of follow-up photographs found no significant difference in the final appearance of the nose and lip for patients who had secondary surgery versus primary surgery only. (The researchers emphasize that secondary surgery may have improved outcomes for some children, even though there was no overall difference between groups.)

Secondary surgery for cleft lip and palate adds to the "burden of care" in terms of pain and fear for children and time off work for parents, as well as higher healthcare costs. The results are consistent with a previous European study (Eurocleft) reporting variations in secondary surgery rates.

"This study raises the important question of why variation exists between centers in the use of secondary surgery," Dr. Sitzman and colleagues write. It may be that some centers achieve better results with the initial surgery, or that centers have different thresholds for recommending further surgery. The researchers note that their study didn't include photos to assess the results of the primary surgery.

But regardless of the source of the variation, "The effect is broad differences in a child's burden of surgical care depending upon where they are treated," Dr. Sitzman and coauthors write. They call for further studies to better define the role of secondary surgery for children with cleft lip and palate.

More information: The Americleft Project: Burden of Care from Secondary Surgery. DOI: 10.1097/GOX.0000000000000415

Provided by Wolters Kluwer Health