

Cleft lip surgery in newborns - our eighteen-year experience.

Borský J¹, Jurovčík M¹, Novotná K^{1,2}, Dytrych P¹, Janota J⁴, Jaklová L³, Velemínská J³, Čada Z¹



¹ENT dpt.Motol University Hospital, 2nd Faculty of Medicine, Charles University, Prague, Czech Republic

² Department of Plastic Surgery, University Hospital Kralovske Vinohrady and 3rd Faculty of Medicine, Charles University, Prague, Czech Republic

³Anthropology and Human Genetics, Faculty of Science, Charles University , Prague 2, Czech Republic

⁴ Department of Neonatology, Motol University Hospital, 2nd Faculty of Medicine, Charles University, Prague, Czech Republic

Objectives Cleft lip surgery is usually performed at the age of 3 months or later. Nursing babies with visible facial disfigurement for three months can adversely affect the psychological wellbeing of these patients' families. Early surgical intervention can achieve not only good anatomical correction, but also significantly improve the quality of life of the whole family. The goal was to evaluate a group of patients with regard to postoperative complications and aesthetic result.

Methods We operated on 795 patients cleft lip or cleft lip and palate at the age of 1 to 8 days after birth: 650 neonates with unilateral cleft lip and 115 with bilateral cleft lip. One surgeon from December 2005 to December 2022 performed all operations. A neonatologist was responsible for preoperative care and post-operatively in the NICU. Before surgery we performed 3D scans of palate shaped casting using laser scanner as well as facial scanner 3D. Newborns left the hospital between the 3rd and 4th postoperative day. All patients wore supportive silicon nostril retainers for 2-3 months. surgery of the lip. Long term monitoring is required.

Fig.No 1. 1day after birth and 4 months after surgery



Fig.No 2. 1day after birth and 2 years after surgery

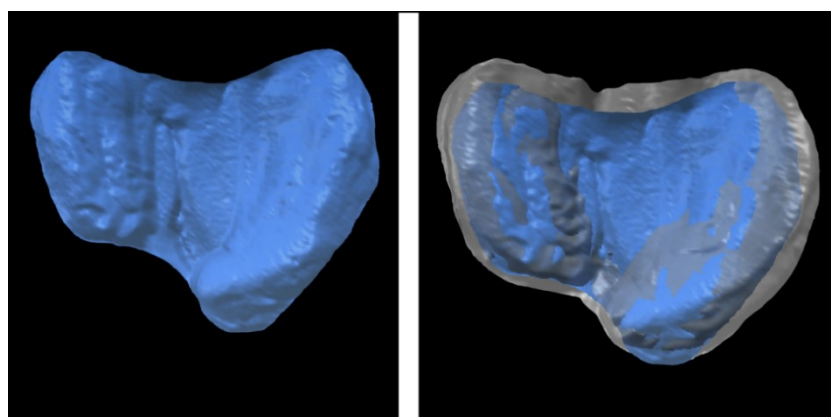


Fig.No 3. 3 days after birth and 4 years after surgery

Fig.No 4. Cleft palate decal



Fig.No 5. Blue colour - 3D model before cheiloplasty, Grey colour - 12 months after cheiloplasty



Results At the time of patients discharge the wounds were usually healed. Postoperative complications were found for 7 patients (0,88%). We presume that the aesthetic results are superior to patients operated in 3 months and later. Comparison of 3D scans of palate and face between study group and controls revealed no significant difference in maxila and face growth.

Conclusion If early correction of the lip is performed by an experienced surgeon with a high-quality anesthesiology and neonatology background, it is a safe method for newborns with very good aesthetic results.