



Craniofacial Surgery

 **Morgan Stanley**
Children's Hospital of New York-Presbyterian
Columbia University Medical Center

The Cleft and Craniofacial Center

Each year in the United States thousands of infants are born with cleft lip, cleft palate, and other complex facial deformities.

Trauma and facial tumors also result in facial disfigurement in children. Without the appropriate treatment, babies with birth anomalies or young children whose faces are damaged by disease or accident are likely to grow up feeling rejected and isolated by the indignities they often suffer because of their appearance. Treatment for disfiguration among children has been increasingly successful in recent decades and is still being advanced.



Cover:
After
2 years following left cleft lip repair

About The Cleft and Craniofacial Program

The Cleft and Craniofacial Center at the Morgan Stanley Children's Hospital of NewYork-Presbyterian stands at the forefront of care for children with facial conditions and complex facial deformities, including those caused by congenital anomalies, disease or accidents. Our Center's surgeons are trained in a full range of reconstructive procedures, including craniofacial surgery, maxillofacial surgery, and microsurgery. As caregivers, our goal is to always push the limits of what we can safely achieve so your child can ultimately thrive and have the opportunities that other children have.

Our Center's staff provides comprehensive specialty consultation and care for children with deformities. A team of specialists work together to produce a coordinated and comprehensive management plan so you and your child's pediatrician are not left to struggle with coordinating steps in your child's treatments. Management plans are developed with active participation from parents- thus providing families with a clear understanding of the various ways in which a child's care can be handled, and to impart confidence in the choice of treatment. Most importantly, we understand that children with facial deformities have complex and specialized needs. Our staff is committed to creating a treatment plan that is tailored to your child's unique needs, and executing this plan in a timely manner.

Strengthened by its multidisciplinary resources, our Center is fully prepared to assist you in every way that will help assure positive change in the life of your child. We welcome you to our Center, and invite you and your child to learn more about our program, procedures, and physicians.



Before

Preoperative view of patient shown on cover

Detail ▶

Preoperative view of same patient from below showing associated nasal deformity



The Multidisciplinary Cleft and Craniofacial Team

Many specialists are needed to provide the expert consultation and skillful care required to diminish the problems of craniofacial disfiguration. The following healthcare professionals work as a team to provide your child with the best possible care:

- audiologists (hearing specialists)
- genetic counselors
- neurosurgeons
- nurse coordinators
- occupational and physical therapists
- ophthalmologists
- oral and maxillofacial surgeons
- orthodontists
- otolaryngologists (ear-nose-throat specialists)
- pediatric dentists
- pediatricians
- plastic and craniofacial surgeons
- social workers
- speech and language specialists

Conditions Treated

The Center's staff offer unqualified excellence in treating a multitude of craniofacial problems. The following is a list of just a few of the conditions treated at the Center:

- Cleft lip and cleft palate
- Facial clefting syndromes, including Treacher Collins syndrome
- Dentofacial deformities and malocclusion
- Craniosynostosis syndromes, including Crouzons and Aperts syndromes
- Craniofacial trauma
- Facial and jaw tumors

Services Offered

The Center offers your child the advantage of access to expertise in every specialty:

Audiology - Hearing difficulties and middle ear dysfunction often occur in infants and children with craniofacial anomalies. The auditory system and pathways can be assessed at any age from neonatal/infancy through adulthood. Audiologic services available include otoacoustic emissions (OAEs), auditory brainstem response (ABR) testing, emittance audiometry, behavioral audiologic evaluations including visual reinforcement audiometry, and hearing aid evaluations/ fittings. Testing and treatment is conducted by the Center's specially trained audiologists.

Genetics - The Division of Genetics provides prenatal, pediatric, and adult diagnostic testing of birth defects and/or genetic conditions. Genetic counseling is an integral component of the program, including a discussion of genetic risks for future offspring. The Center is staffed by a clinical geneticist, genetic counselors, and supporting staff. Cytogenetic and DNA diagnostic testing are done at the Center, and laboratories in other areas of the country are often used as well.

Oral Health Care Services - Oral health care services include orthodontics, pediatric dentistry, and oral surgery. Infants and children with craniofacial anomalies require specialized dental services. The dental care must be an integrated part of the overall rehabilitative process. Services for these patients include not only primary care but also routine maintenance throughout life. The necessary procedures focus on monitoring craniofacial growth and development, correcting jaw relationships and dental arches prior to surgical procedures such as lip and palate repair, and bone grafting and orthognathic surgery. Prosthetic appliances to assist speech in the cleft palate patient and to replace or restore oral and facial structures can be provided.

Pediatricians - Pediatricians are an integral part of the Center. They supervise your child's nutrition, growth, development, and other general medical care issues not covered by other team members. They also help coordinate the care provided by our team with your child's primary care physician.

Speech and Language Pathology - Children with craniofacial abnormalities may present articulation disorders, resonance disorders, swallowing disorders, and secondary language disorders. Testing may be undertaken within the first year. As with hearing impairments, early diagnosis and intervention are critical. The Center's speech and

language pathologists are available to evaluate your child, and to provide a variety of treatment modalities.

Surgical Services - Surgical services available at the Center include neurosurgery, ophthalmic and oculoplastic surgery, oral and maxillofacial surgery, otolaryngology/head and neck surgery, and plastic and reconstructive surgery. Timely surgical management of patients with craniofacial anomalies including cleft lip and palate, facial clefts, facial tumors, craniosynostoses, and dentofacial deformities can minimize the impact of these conditions on cranial and facial growth, development, and final function and appearance of your child. Team management also provides care for other conditions, including congenital deformities of the eyelids, eye muscles and tear ducts, swallowing, hearing and speech difficulties due to cleft palate and velopharyngeal insufficiency, and jaw and occlusal discrepancies. Trained in centers around the world, the surgical staff offers in-depth expertise and compassionate care to your child.

Accomplishments and Research

Members of our team remain on the cutting-edge of research for craniofacial disfiguration. Research activities include developing novel treatments for speech disorders, creating new techniques to stimulate and promote cranial bone formation, and conducting a number of studies focused on the cause and treatment of hemangiomas and other vascular anomalies.



Before
5 week old patient with
right cleft lip and palate

After
2 years following right
cleft lip repair



Humanitarian Missions

The Cleft and Craniofacial Center is a recognized world leader in the field of reconstructive surgery. Team members regularly organize and participate in a number of non-profit surgical missions to other countries, including Colombia, Honduras, Ecuador, and China, to treat children with cleft lips, cleft palates, and other surgical problems. On a typical mission, 50 to 100 surgeries are usually performed. The Center's staff has successfully trained surgeons in these countries in the latest procedures for complex facial deformities.



After
5 1/2 years following
right cleft lip repair

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