International Society of Craniofacial Surgery

ISCFS NEWSLETTER

Volume 3 | Number 4



IN THIS ISSUE:

PSYCHOSOCIAL ASPECTS

ISSVA CLASSIFICATION OF VASCULAR ANOMALIES

MENTORSHIP UNDER SCARCITY

OCTOBER 2026

Volume 3 | Number 4

MESSAGE FROM THE EDITOR

Dear Colleagues,

The fall and the start of the academic year are always an exciting time for the International Society of Craniofacial Surgery. The past year has reminded us of the strength of our international community, from the outstanding 21st Congress in Shanghai to our continuing quarterly webinar series and ISCFS newsletters. These activities reflect what makes the ISCFS unique: the opportunity to learn from colleagues across disciplines, continents, and generations while sharing a common commitment to improving the lives of patients with craniofacial conditions.

Our educational program continues to grow. This year's webinars have addressed challenging and highly relevant topics including late-presenting sagittal craniosynostosis, on-lay cranioplasty, and cleft orthognathic surgery. The most recent webinar on September 8th, "Cleft and facial bone grafting," moderated by Mark Urata, with panelists Jeffrey Hammoudeh, Michael Krimmel, and Tae Suk Oh, brought together world leaders to debate approaches to these common procedures. Similarly, we are thankful to members Irene Mathijssen, Richard Hopper, Roman Khonsari and Chad Purnell who shared their expertise on "Complex Jaw Reconstruction in Syndromic Patients" at the European Association for Cranio-Maxillo-Facial Surgery in Athens, Greece. They highlighted what most of us know: the ISCFS is THE PLACE to go for mastery in cranio-maxillo-facial surgery. I encourage everyone to take advantage of the educational resources available through the ISCFS website and members' area.

Most importantly, planning is well underway for the **22nd ISCFS Congress in Rotterdam, The Netherlands, September 7-10, 2027**. Under the leadership of ISCFS President Irene Mathijssen, the meeting will focus on "**Team Care**," reflecting the increasingly multidisciplinary nature of craniofacial surgery. Plastic surgeons, neurosurgeons, maxillofacial surgeons, orthodontists, otolaryngologists, anesthesiologists, radiologists, geneticists, psychologists, speech pathologists, researchers, and many

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others all play essential roles in achieving the best outcomes for our patients who both want and demand the optimal outcomes that arise when this complex group of specialists bring their expertise to the table and communicate. The scientific program will also highlight rapidly evolving areas including artificial intelligence, virtual surgical planning, simulation, airway management, and multidisciplinary care pathways.

Rotterdam promises to be much more than a scientific meeting.

It will be an opportunity to reconnect with old friends, establish new collaborations, and strengthen the international community that is at the heart of the ISCFS.

I look forward to seeing many of you in the coming months and, ultimately, in Rotterdam in 2027.

With warm regards,



JESSE TAYLOR
ISCFS Secretary-Treasurer
UNITED STATES



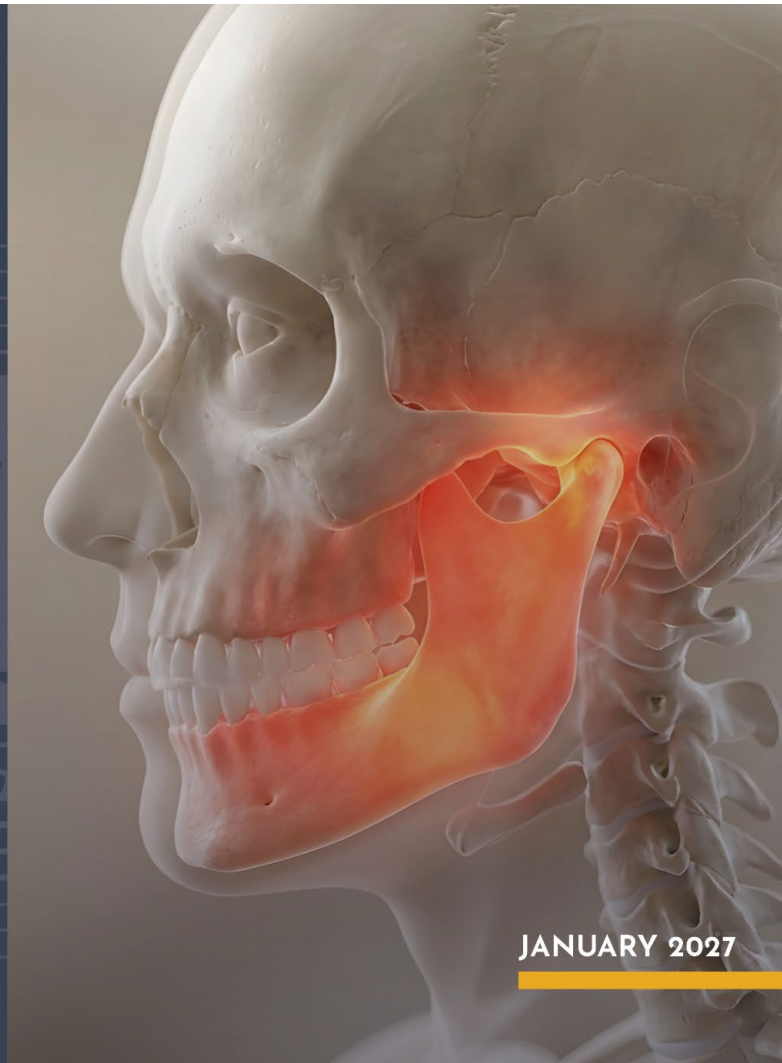
ISCFS NEWSLETTER

Volume 4 | Number 1

MEMBERS! PLEASE WRITE AN ARTICLE FOR

MY WAY:
Combined TMJ Reconstruction with Orthognathic Surgery

To submit an article of 750-1000 words with up to 5 JPG images as needed, send it to admin@iscfs.org no later than Tuesday, December 15, 2026.



JANUARY 2027

MESSAGE FROM THE PRESIDENT

Dear ISCFS members,

With less than a year to go until the 22nd Congress of the ISCFS takes place in Rotterdam, we are actively working to generate enthusiasm for both the meeting and our society. Last month, the ISCFS was represented at the European Association for Cranio Maxillofacial Surgery (EACMFS) in Athens. We hosted a booth that was run by Verena Reinmuth and Barbara Boeld and we held an ISCFS panel featuring Richard Hopper (US), Hosein Khonsari (France), Chad Purnell (US), Mert Calis (Turkey) and me. The attendance was high and we hope it inspired more maxillofacial surgeons to become involved with our society.

The program of our Pre-Congress Symposium focusing on TEAM WORK is nearly finalized. It will bring together pediatric intensivists, pediatric ENT-surgeons and pediatric anesthesiologists who will share their expertise regarding breathing issues and difficult airways in craniofacial anomalies.

One of the speakers, who has already confirmed his presentation, will be Professor Andrew Wilkie (United Kingdom). He is the leading geneticist the field of craniosynostosis and has made a huge contribution during the past thirty years. Knowing the underlying genetic causes has brought us a much more gene-specific treatment strategy, further improving the care of our patients.

For the social part of the Congress, we are arranging a walking dinner at Hotel New York. This is the former office building of the Holland America Line, constructed in 1901, from where thousands of European emigrants left for America. We invite all participants to take part in this informal get together at a historic site. It will be an inspiring place for us all to get to know each other better.

Irene Mathijssen
President
The Netherlands



Hotel New York



IRENE MATHIJSSEN
ISCFS President
THE NETHERLANDS

" It will be an inspiring place for us all to get to know each other better."

NEXT WEBINAR TOPIC – NOVEMBER

COMBINED TMJ RECONSTRUCTION WITH ORTHOGNATHIC SURGERY

JANUARY 19TH, 2027 | 23:00 UTC

Join us on January 19th 2027 at 23:00 UTC for an in-depth discussion.



FELLOWSHIP DIRECTORY

Many of our members offer fellowship programs, and eleven are listed on our website - https://www.iscfs.org/fellowship-program/

As part of our ongoing commitment to provide various educational opportunities, we include a Fellowship Directory on the website. Members can complete a simple application to include information about fellowships they offer. Those interested in more information about any fellowship listed are asked to contact the program directly.

The following disclaimer will be included with each listing:

The *International Society of Craniofacial Surgery* (ISCFS) has no influence over or responsibility for the training content or admission of applicants to Fellowships offered by our members. All arrangements regarding program duration, travel, stipends, and housing are entirely between each individual program and the Fellow. ISCFS provides this listing as a service to our members and trainees in the interest of providing ongoing education, training and sharing or skills and ideas.

Take a look now: https://www.iscfs.org/membership/



WINDOW INTO HISTORY

CLEFT PALATE SURGERY: ORIGIN AND EVOLUTION

INTRODUCTION

It is only during the second decade of the 19th century that cleft palate surgery was first introduced. Why so late with respect to other procedures? Indeed, cleft palate surgery was regarded as a difficult operation. For the surgeon, who had to work in a dark cavity, such as the fauces, it represented a major issue. Moreover, oral mucosa is prone to bleeding. Thus, achieving good lighting of the oral cavity to prevent blood aspiration into the lungs, with potential risk of death, was essential, but at the same time almost impossible to obtain. Without anesthesia, the patient moved the head continuously and velar approximation by suturing was a seemingly difficult task.

Before that, closure of palatal defects resulting from traumas, syphilis or congenital anomalies was by obturators, made of silver or wood, locally placed by means of special forceps. Their task was to improve phonation or avoid regurgitation of food into the nose. In 1561, the Frenchman Ambroise Paré (1510-1590) illustrated an example of these obturators ***(Figure 1)***. [1]

THE BEGINNING OF CLEFT PALATE SURGERY

The question of priority of cleft palate repair was a matter of great dispute between the German, Carl Ferdinand von Gräfe (1787-1840) and the Frenchman, Philibert Joseph Roux (1780-1854). Independently, they described the simple closure by approximation of a congenitally divided palate.

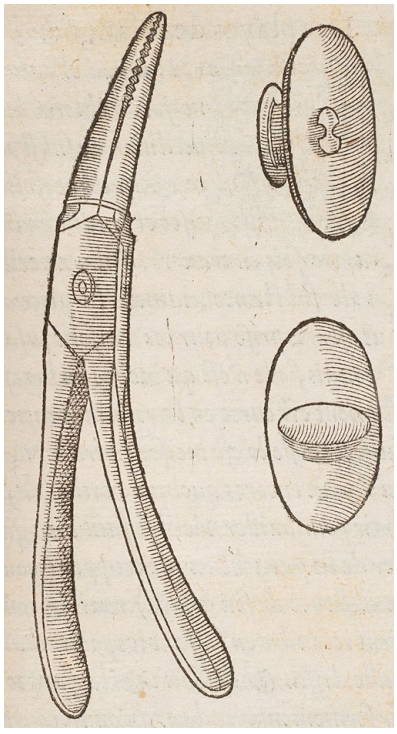


Figure 1 - Palatal obturators and the forceps to place them into position. (From A. Paré, ref. No.1)



RICCARDO F. MAZZOLA
History Editor
ITALY

"Indeed, cleft palate surgery was regarded as a difficult operation."

In 1817, von Gräfe, at that time appointed Professor of Surgery at the Surgical Clinic of Berlin University, announced the successful closure of a cleft palate. He published a brief note in a local scientific journal in German. [2] The operation, carried out in 1816, consisted of the cauterization of the cleft's borders to freshen the margins and in their approximation with sutures. Initially, perfect healing occurred. The patient could swallow quite well and speak clearly post-operatively. However, a wound breakdown occurred gradually and eventually the palate reopened.

Thereafter, von Gräfe operated on more cases. He improved the procedure, creating new dedicated instruments. Three years later, in 1820, he issued a detailed report on the technique, supplemented by pre- and post-operative images of a patient with cleft palate. ***(Figure 2)***. [3]

In 1819, Roux, at that time a surgeon working at the *Hôpital de la Charité* in Paris, performed a similar operation. He published an account on this topic in an important French scientific journal [4] and claimed to be the first to have successfully closed a congenital cleft palate. The patient was in a sitting position. Roux passed three wax coated loops in the palatal mucosa using a curved needle. In this way, he could draw the cleft's margins towards the midline until a firm approximation was obtained. The sutures were cut close to the knots. The post-operative course was uneventful, despite the fact that the two margins of the uvula remained divided. At the end of the operation, the voice became almost normal. Roux's patient was John Stephenson (1797-1842), a medical student from Montreal,Canada, who was concerned about his nasal speech. Interestingly, Stephenson described his own experience in his graduation thesis that was discussed the following year in Edinburgh [5]. He became a surgeon in Montreal and was later appointed Professor of Anatomy.

Roux's paper was not well received, possibly due to the envy of numerous colleagues. They objected that von Gräfe was the inventor of the method, not Roux. Priority regarding the procedure became a matter of national honor, shared between France and Germany. Von Gräfe accused Roux of plagiarism. On the other hand, some time later, Roux reconsidered the question of the priority of the operation. Indeed, - he said - von Gräfe's procedure was performed in 1816, that is three years before his own case, but first of all it was unsuccessful and secondly it was published as a short note in a local German journal, with no circulation in France. He concluded that this is the reason why his case deserves priority.

In 1825, Roux issued an essay on this topic, *Mémoires sur la Staphyloraphie ou la suture du voile du palais* (Memoire on Staphyloraphy or suture of the velum) [6], in which besides offering a detailed description of the procedure, he added illustrations of the pre- and post-operative results of cleft palate suture, and he coined the term Staphyloraphy to name the operation ***(Figure 3)***.

On the wave of the newly discovered procedure by numerous surgeons in Europe, some in the United States dedicated

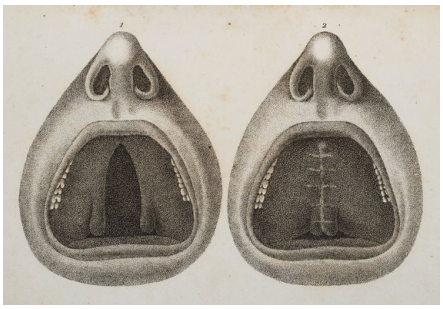


Figure 2 - Cleft palate and its suture, according to von Gräfe CF. (From CF von Gräfe, ref. No.3)

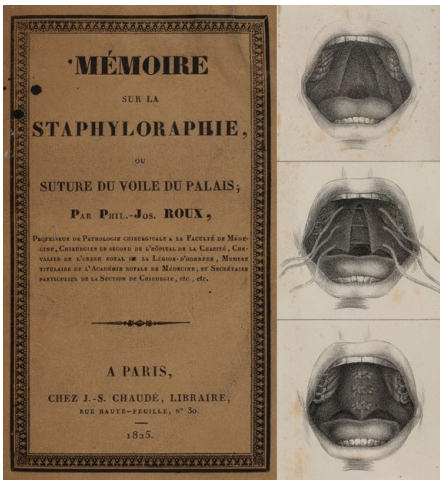


Figure 3 - Cleft palate closure, according to Roux PJ. A) Title page; B) Upper right: Cleft palate pre-operative situation. Center: palatal mucosa suturing. Lower right: final result. (From PJ Roux, ref. No.6)

themselves to the closure of congenital palatal defects. However, tension resulting from cleft palate tight union was the main cause of the high rate of postoperative wound breakdown.

A revolution in cleft palate surgery came from the German Bernhard von Langenbeck (1810–1887). He advocated the outlining of two bipedicled mucoperiosteal flaps, undermined and elevated from the hard palate, using specially devised blunt raspatories, still used today ***(Figure 4e)***.

To achieve flap approximation along the midline and their suture

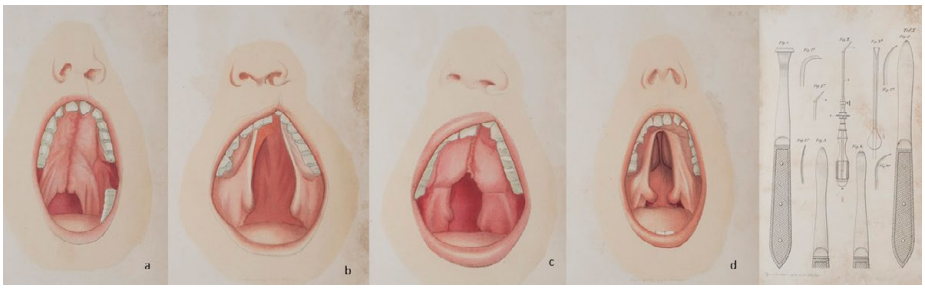


Figure 4 - Cleft palate closure with mucoperiosteum undermining, according to von Langenbeck B.R. with the instruments necessary for the operation (right). (From B.R von Langenbeck, ref. No. 7)

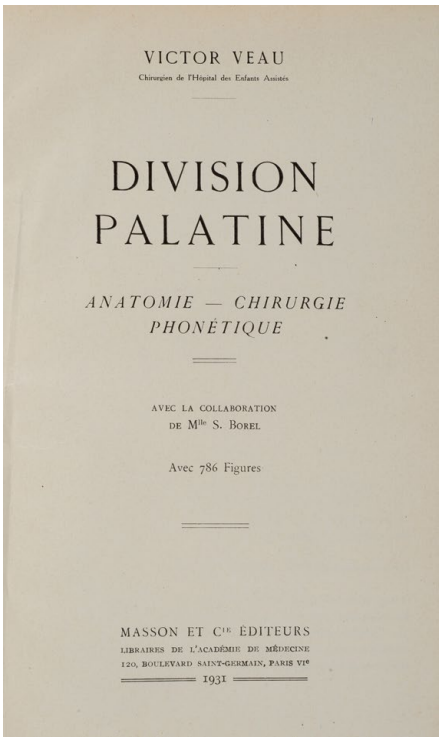


Figure 5 - Title page of the book by Victor Veau on cleft palate treatment (From V. Veau, ref. No.8)

with silver wire, he performed two full-thickness relaxing incisions carried out parallel to the alveolar ridge, from the canines backward to the retromolar ridges, preserving the superior palatine artery ***(Figure 4a)***. In 1861, he published his landmark paper, *"Die Uranoplastik mittelst Ablösung des mucös-periostalen Gaumenüberzuges"* (Uranoplasty by means of undermining the muco-periosteal covering). [7]

Despite the fact that ether anesthesia had been discovered in 1846, and widely employed in clinical practice, Langenbeck preferred to use ice instead as an anesthetic, possibly to reduce bleeding. The advantage of the procedure was significant. Complete clefts could be closed more predictably in a single stage, with reduced tension and better final results. Tension, however, was still present in the velar region, causing partial reopening of the velum ***(Figure 4c)***.

However, one has to await the Frenchman, Victor Veau (1871-1949), who in his classic monograph *Division Palatine* (Cleft Palate) published in 1931 ***(Figure 5)*** [8], reported the dissection of the lateral pharyngeal spaces, using the pterygo-mandibular raphe as access. In this way, he obtained a complete mobilization of the whole velar region, achieving less tension and reduced the rate of reopening. In the same monograph, he first advocated the importance of levator *veli palatini* suture to obtain the soft palate elevation, a key point for correct cleft palate management.

More information regarding this fascinating chapter of plastic surgery history can be found in the book *Plastic Surgery – An Illustrated History* by Mazzola RF and Foss CB. [9]

REFERENCES

1. *Paré A. La méthode curative des playes et fractures de la teste humaine (The method of treating wounds and fractures of the human head). Paris, Iehan le Royer, 1561*
2. *Gräfe CF von. Kurze Nachrichten und Auszuge (Short descriptions and reports). J pract Heilk. 1817; 44: 116. Reprinted in: Mc Dowell F. The Source Book of Plastic Surgery. Baltimore, Williams and Wilkins, 1977. p. 278-279*
3. *Gräfe CF von. Die Gaumennath, ein neuenentdecktes Mittel gegen angeborene Fehler der Sprache (Palate suture, a newly discovered Method to correct congenital Speech Defects). J Chir Augenheilk. 1820; 1: 1-54. Reprinted in: Mc Dowell F. The Source Book of Plastic Surgery. Baltimore,Williams and Wilkins, 1977. p. 280-284*
4. *Roux PJ. Observation sur une division congénitale du voile du palais et de la luette, guérie au moyen d'une opération analogue à celle du bec de lièvre (Observation on a congénital division of the soft palate and uvula cured by means of an operation similar to that for hare-lip). J Univers Sci méd. 1819; 16: 356. Reprinted in: Mc Dowell F. The Source Book of Plastic Surgery. Baltimore, Williams and Wilkins, 1977. p. 267-270*
5. *Stephenson J. De Velosynthesis (On the union of the Velum). Edinburgh, P. Neill, 1820. Reprinted in: Mc Dowell F. The Source Book of Plastic Surgery. Baltimore, Williams and Wilkins, 1977. p. 271-277*
6. *Roux P.J. Mémoires sur la staphyloraphie ou la suture du voile du palais. (Memoire on Staphyloraphy or suture of the velum). Paris, J.-S Chaudé, 1825*
7. *Langenbeck B.R.von. Die Uranoplastik mittelst Ablösung des mucös-periostalen Gaumenüberzuges (Uranoplasty by means of undermining the muco-periosteal covering). Arch f kl Chir. 1861; 2: 205-287. Reprinted in: Mc Dowell F. The Source Book of Plastic Surgery. Baltimore, Williams and Wilkins, 1977. p. 308-312*
8. *Veau V. Division Palatine. Anatomie. Chirurgie. Phonétique (Cleft palate. Anatomy. Surgery. Speech). Paris, Masson & C., 1931*
9. *Mazzola RF, Foss CB. Plastic Surgery. An Illustrated History. Cham: Springer, 2023*

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FEATURE

THE 2025 ISSVA CLASSIFICATION OF VASCULAR ANOMALIES: WHAT CHANGED AND WHY IT MATTERS



DOV C. GOLDENBERG
BRAZIL

Classification is not about naming. It is about thinking. A good classification turns biological complexity into categories that guide diagnosis, prognosis and treatment. In vascular anomalies, the stakes are concrete: a wrong map leads to the wrong destination. Misclassification means a wrong diagnosis, a wrong diagnosis means the wrong treatment, and the wrong treatment means worse outcomes.

FROM "HEMANGIOMA" TO BIOLOGY

Until the late twentieth century, the word "hemangioma" was used for almost any vascular lesion, and many families waited for involution in lesions that would never regress. In 1982, Mulliken and Glowacki proposed a classification based on endothelial behavior and natural history, and the International Society for the Study of Vascular Anomalies (ISSVA) adopted this dichotomy in 1996, naming the two main categories as "Vascular tumors" and "Vascular malformations". It has become the global standard. ISSVA revised the classification in 2014 and 2018 since new knowledge emerged.

WHY A NEW REVISION?

Genetics has transformed the field. Most vascular malformations are now known to be caused by somatic pathogenic variants, many in the PI3K/AKT/mTOR and RAS/MAPK pathways. Now, malformations are believed to attain some proliferative potential, even if they are not true neoplasms. Targeted therapies have reached clinical practice, but they carry potentially serious side effects. Multidisciplinary approach now plays an essential role in management. Consequently, misclassification is no longer only a semantic problem: it can lead to the wrong therapeutic approach and real harm to patients.

HOW THE UPDATE WAS BUILT

The revision began in 2019 at the initiative of the ISSVA Board. A Classification Group linked to the Scientific Committee organized

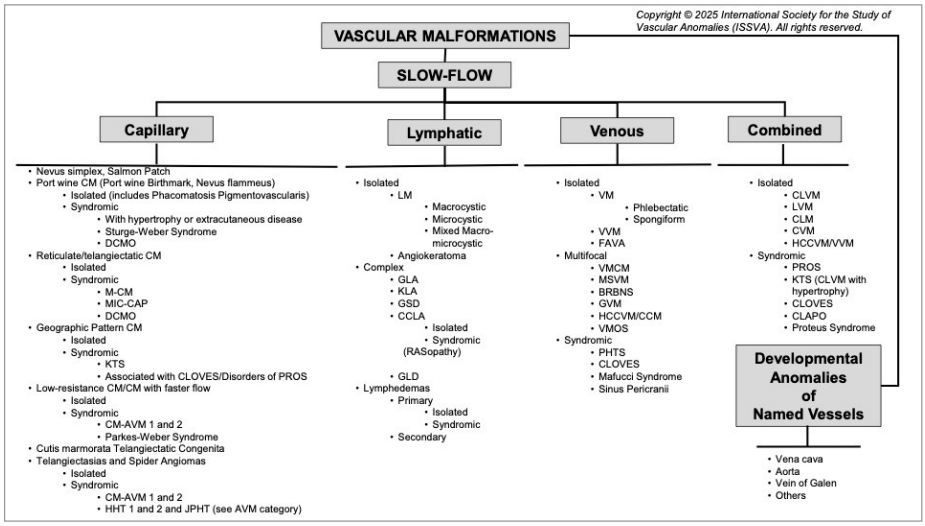


Figure 1

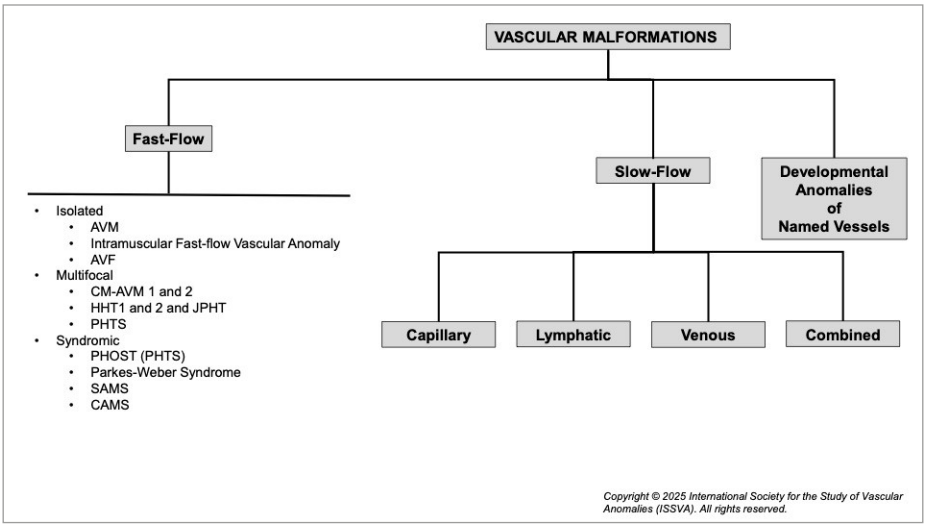


Figure 2

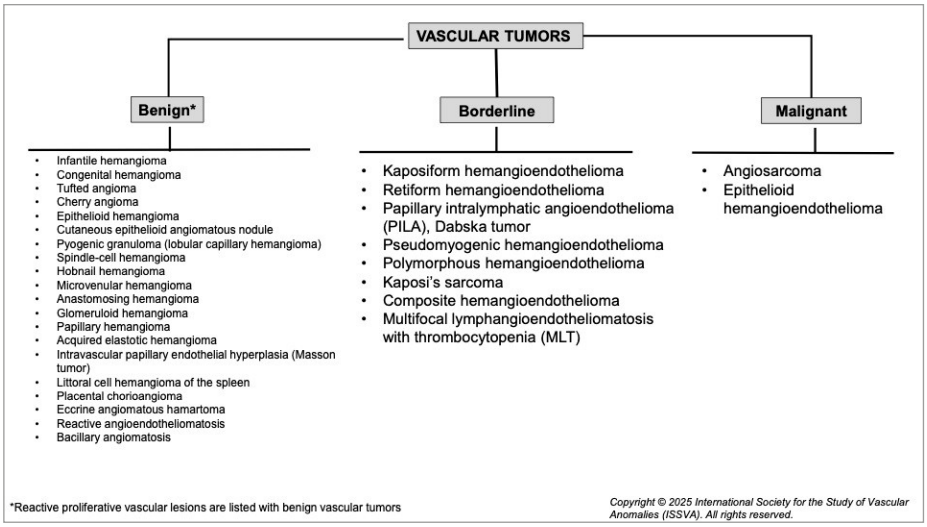


Figure 3

five subgroups (vascular tumors, and capillary, venous, lymphatic and arteriovenous malformations), bringing together experts from multiple specialties. Each subgroup re-examined the 2018 classification considering clinical behavior, histology, flow velocity and genetics. Drafts were debated and refined in subsequent international meetings, and, after an open comment period, presented for ratification at the 2024 ISSVA Congress in Madrid. The result was published in the Journal of Vascular Anomalies in June 2025.

WHAT IS NEW

A LANDING PAGE

The classification now opens with a one-page overview that keeps the fundamental division between vascular tumors and vascular malformations. It is designed so that any physician can place a lesion in the right category at first contact. Detailed classification pages follow for specialists.

POTENTIALLY UNIQUE VASCULAR ANOMALIES (PUVA)

This category replaces "provisionally unclassified vascular anomalies."

VASCULAR TUMORS

The benign, borderline and malignant tiers are preserved. All histopathologic variants of benign tumors now appear in a single list, without the former "other" and "related lesions" labels, and reactive proliferative lesions are listed with benign tumors.

MULTIFOCAL

lymphangioendotheliomatosis with thrombocytopenia (MLT) joins the borderline group, which highlights lesions with aggressive behavior, such as those associated with the Kasabach-Merritt phenomenon. The malignant list is unchanged.

VASCULAR MALFORMATIONS: FLOW FIRST

This is the deepest change. The old division into "simple" and "combined" malformations, organized by vessel type, did not reflect fundamental differences in etiology. Malformations are now divided into three groups: fast-flow, slow-flow, and developmental anomalies of named vessels. The category "vascular malformations associated with other anomalies" disappears; syndromes are placed within the relevant subtypes.

Fast-flow malformations are isolated (AVM, arteriovenous fistula, the new "intramuscular fast-flow vascular anomaly"), multifocal (as in CM-AVM 1 and 2, hereditary hemorrhagic telangiectasia and PTEN hamartoma tumor syndrome) or syndromic (Parkes Weber syndrome, spinal and cerebrofacial arteriovenous metameric syndromes). PTEN hamartoma of soft tissue (PHOST) is recognized as a distinct entity.

Slow-flow malformations are grouped as capillary, lymphatic, venous or combined. Capillary malformations are now described

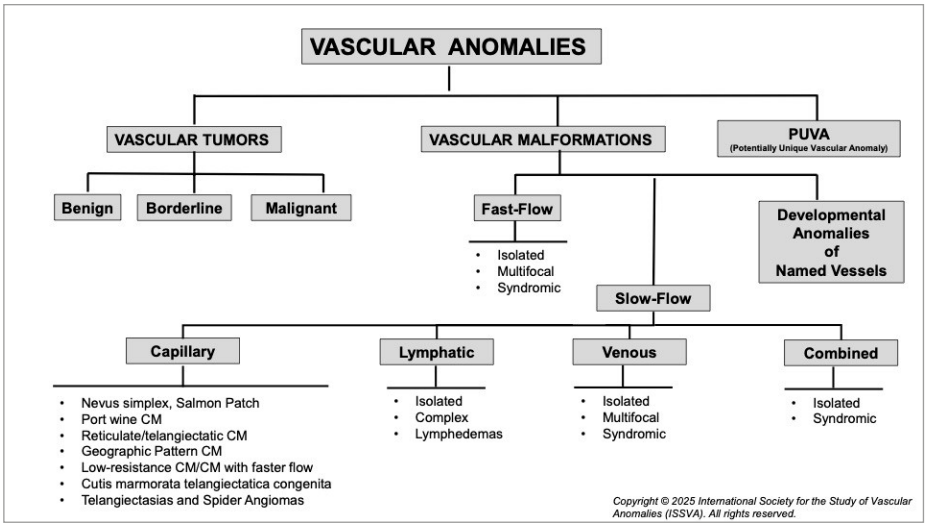


Figure 4

by cutaneous pattern: nevus simplex/salmon patch, port-wine, reticulate/telangiectatic, geographic, low-resistance (faster flow), cutis marmorata telangiectatica congenita, and telangiectasias/spider angiomas, each with isolated and syndromic forms. Lymphatic anomalies are divided into isolated lymphatic malformations, complex lymphatic anomalies (including generalized lymphatic anomaly, kaposiform lymphangiomatosis, Gorham-Stout disease and central conducting lymphatic anomaly) and lymphedemas. Venous malformations are isolated (phlebectatic, spongiform, verrucous, FAVA), multifocal or syndromic (including CLOVES, Maffucci syndrome and sinus pericranii). Combined malformations are isolated or syndromic, such as PIK3CA-related overgrowth spectrum and Klippel-Trenaunay syndrome.

NAMED VESSELS

Anomalies of large named vessels, such as the aorta, vena cava and vein of Galen, remain in the classification in a simplified form, so that the whole spectrum of vascular anomalies is covered by one system.

A NEW GLOSSARY

A companion "Glossary of Vascular Anomalies" defines, in alphabetical order, every technical term, eponym, acronym, gene and syndrome, each coded by type. Hosted online with hyperlinks to the classification, it will be updated regularly and, in the future, linked to clinical, imaging and pathology atlases.

CLOSER TO MOLECULAR, BUT NOT PURELY GENETIC

Grouping by flow brings genetically related lesions together: PIK3CA-driven lesions, previously spread across lymphatic, venous and mixed categories, now sit under slow-flow, while fast-flow lesions are increasingly linked to the RAS/MAPK pathway. Still, a purely gene-based classification was rejected. One variant can produce very different phenotypes, different variants can produce similar ones, and the phenotype also depends on the cell type and the developmental moment in which the mutation occurred. Genetics must be read together with clinical, radiological and histological data.

Two principles guided difficult decisions. Entities that are clinically and histologically indistinguishable were kept in a single branch, even when only genetics separates them. And the classification remains lesion-based, not patient-based: one patient may have more than one anomaly, and the Glossary points clinicians to the syndromes a lesion may signal.

A LIVING DOCUMENT

No classification is ever final. ISSVA has created a permanent working group to keep it current. Treatment-oriented systems, such as the Schobinger, Yakes, Cho-Do and Puig classifications, or staging systems for lymphatic malformations, remain valuable for refining management. Our hope is that they continue to evolve while using the shared ISSVA terminology for the main diagnostic categories.

THE BOTTOM LINE

A classification is never neutral: it shapes how we think, diagnose and treat. The 2025 update reflects biology, remains clinically usable at every level of care and prepares the ground for precision medicine. When we classify correctly, we treat correctly.

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REFERENCES

1. *Goldenberg DC, Vikkula M, Penington A, Blei F, Schultze-Kool L, Wassef M, Frieden IJ; ISSVA Vascular Anomalies Classification Group. Updated Classification of Vascular Anomalies: a living document from the ISSVA Classification Group. J Vasc Anom. 2025;6:e113. doi:10.1097/JOVA.0000000000000113*
2. *ISSVA Classification of Vascular Anomalies ©2025 and Glossary of Vascular Anomalies: issva.org/classification*

CASE REPORT

TRANSCONJUNCTIVAL APPROACH WITH RECTUS LATERAL SECTION TO MANAGE AN OCULAR GLOBE TUMOR



ATILA AMARAL AZEVEDO
BRAZIL



JAIR LEOPOLDO RASO
BRAZIL



ALEXANDRE YOUNG
BRAZIL



CLARISSA L TURRER
BRAZIL

INTRODUCTION

Orbital neoplasms exist in a wide spectrum of both benign and malignant tumors, with different histologic origins, although it has been found that most are benign. A survey of 1264 patients by Shields et al found that 64% of orbital neoplasms were benign and 36% malignant, with malignancy rates increasing with age. [1] Hemangiomas are the most common benign orbital tumors in both children and adults and the most common malignant lesions are rhabdomyosarcoma in children and lymphoma in adults. [2, 3] Orbital tumors can be classified according to their location as primary tumors of the orbit, secondary tumors originating in adjacent structures that extend to the orbit and invade it, and metastases. [4] Tumors can also be classified by their location according to the muscle cone and the optic canal in intraconal, extraconal, or intracanalicular. [5] Clinically, orbital tumors may present without symptoms, especially in the beginning of slow growth tumors. With progression of the lesion, common manifestations are proptosis, visual impairment, diplopia, strabismus, ocular pain and pupil alterations. [4]

Treatment of orbital tumors may include radiotherapy and chemotherapy for some malignant tumors depending on the histological origin, but surgical resection is the primary treatment for benign lesions and most malignant ones. The surgical technique used in orbital tumor resection depends on the type of tumor, its location and its size. Access to the orbital cavity may be gained through open approaches or through endoscopic access. For an open approach of a tumor confined to the orbit, an orbitotomy may be performed. If the lesion is anterior, transcutaneous or transconjunctival approaches are both adequate and yield good cosmetic results. Apical masses may require a superior orbitotomycraniotomy. [6,7] Depending on the lesion location, the use of minimally invasive endonasal and transorbital endoscopic techniques are viable and have the advantage of leaving no external scars and having faster recovery time. [8]



Figure 1 - Right eye proptosis associated with conjunctival hyperemia.

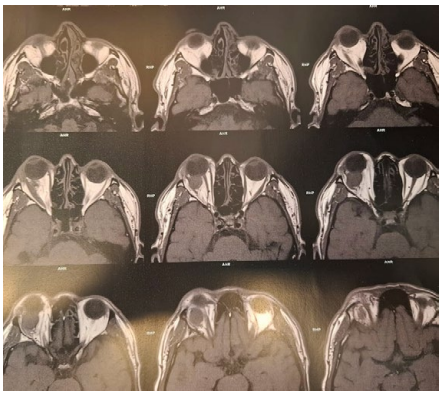


Figure 2 - Orbital MRI demonstrating a retrobulbar mass measuring 2.1 × 2.0 × 1.8 cm, suggestive of a cavernous hemangioma.

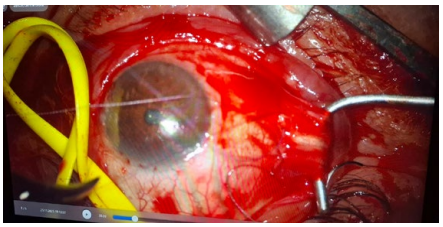


Figure 3 - Intraoperative isolation of the lateral rectus muscle through a lateral transconjunctival approach.

CASE REPORT

A 56-year-old male patient presented with recurrent conjunctival hyperemia associated with a long standing and progressive right-sided proptosis, without visual impairment. An ocular dystopia with inferior displacement of the right globe was observed ***(Figure 1)***. Magnetic resonance imaging (MRI) demonstrated a right retrobulbar expansile mass suggesting vascular lesion (cavernous hemangioma), measuring 2.1 × 2.0 × 1.8 cm ***(Figure 2)***. The procedure was performed in November 2025 by a multidisciplinary team (neurosurgeon, ophthalmologist, and craniofacial surgeon) using a neuronavigation-guide and a microscope. To reach the tumor, a lateral rectus (LR) muscle section was performed and after completed tumor resection the muscle was reconstructed ***(Figures 3 and 4)***. Histopathological examination revealed a mesenchymal neoplasm with a spindle cell pattern and extensive stromal sclerosis. Immunohistochemical analysis revealed a solitary fibrous tumor. Follow up was uneventful, with resolution of eyelid ptosis within 3 weeks and preservation of visual acuity, and satisfactory recovery of extraocular motility and visual accommodation 2 months after surgery (January 2026) ***(Figure 5)***.

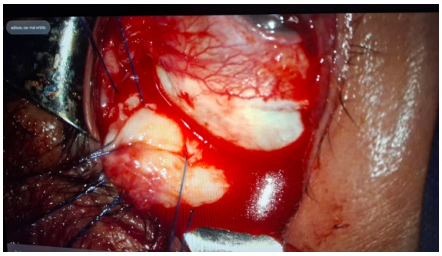


Figure 4 - Surgical access to the retrobulbar tumor following lateral rectus muscle section.



Figure 5 - Clinical appearance two months after surgery, showing complete resolution of proptosis and conjunctival hyperemia and recovery of eye motility.

DISCUSSION

Solitary fibrous tumors (SFTs) are rare mesenchymal neoplasms that account for less than 1% of all orbital masses (1). Orbital surgical interventions for tumors are always a challenge and demand for a detailed plan and multidisciplinary discussion. Visual function, surgical approach and cosmetics concerns must be considered due to the presence of multiple critical anatomical structures in the orbital cavity and its adjacent regions. This case demonstrates a well-defined retrobulbar lesion that was successfully managed via a transconjunctival approach combined with lateral rectus muscle section and immediately reconstruction highlighting a minimally invasive approach to lateral orbitotomy with bone removal. The section of the LR provides a view and space to remove the tumor safely.
The choice for transconjunctival access reduces operative and patient recovery time and preserves anatomical integrity of the periorbital region. It also provides functional and aesthetic preservation as the transconjunctival technique completely avoids external skin incisions and resulting visible scars, yielding high patient satisfaction. Precise anatomical reattachment of the LR muscle ensures the preservation of ocular motility and visual acuity, which is demonstrated at the follow-ups after the operation.

CONCLUSION

Orbital masses may have multiple origins, when neoplasms, benign lesions are more common, especially in younger patients. Surgical resection is the treatment of choice for a large portion of tumors malignant or not located in the orbit. When choosing the surgical approach, multiple factors must be taken into consideration, such as mass

location, size, type of tumor and aesthetic and functional impact. Ultimately, this case confirms that, when adequate to the lesion characteristics, the lateral transconjunctival with temporary LR disinsertion approach is a safe, effective, and reproducible technique for treating orbital tumors. Rigorous preoperative planning with MRI, the assistance of neuro-navigation, and the cooperation of a multidisciplinary team allows for complete mass resection, with clinical manifestations resolution and preservation of orbital and peri-orbital contents functionality and aesthetics.

REFERENCES

1. *Shields JA, Shields CL, Scartozzi R. Survey of 1264 patients with orbital tumors and simulating lesions. Ophthalmology. 2004; 111:997-1008.*
2. *Merck Manual. Tumors of the Orbit. MSD Manual Professional Edition. 2024.*
3. *Long GK. Ophthalmology. 3rd ed. Thieme.*
4. *Castro Junior FM. Cirurgia de Cabeça e Pescoço: Tópicos Essenciais. Rio de Janeiro: Thieme Revinter Publicações; 2019.*
5. *Aftahy AK, Krauss P, Barz M, Wagner A, Meyer B, Negwer C, Gempt J. Surgical Treatment of Intraorbital Lesions. World Neurosurgery. 2021; 155: e805-e813.*
6. *Weizman N, Horowitz G, Gil Z, Fliss DM. Surgical Management of Tumors Involving the Orbit. JAMA Otolaryngol Head Neck Surg. 2013; 139:841-847.*
7. *Bewley AF, Farwell DG. Management of orbital tumors. Curr Opin Otolaryngol Head Neck Surg. 2015; 23:309-15*
8. *Zoli M, Sollini G, Rustici A, Guaraldi F, Asioli S, Altavilla MV, Orsatti A, Faustini-Fustini M, Pasquini E, Mazzatenta D. Endoscopic Transorbital Approach for Spheno-Orbital Tumors: Case Series and Systematic Review of Literature. World Neurosurgery. 2023; 177: e239-e253*
9. *Brasileiro FG. Bogliolo Patologia. 10th ed. Rio de Janeiro: Guanabara Koogan; 2021.*
10. *Zoli M, Sollini G, Milanese L, La Corte E, Rustici A, Guaraldi F, Asioli S, Cirillo L, Pasquini E, Mazzatenta D. Endoscopic approaches to orbital lesions: case series and systematic literature review. J Neurosurg. 2021; 134: 608-620.*



NEW TECHNOLOGY

A SINGLE-STAGE STRATEGY: COMBINED ANTERIOR MAXILLARY AND LE FORT I DISTRACTION OSTEOGENESIS FOR CLEFT-RELATED SEVERE MAXILLARY HYPOPLASIA



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Anterior maxillary distraction osteogenesis (AMDO) and Le Fort I distraction osteogenesis (LFIDO) are established techniques for treating severe maxillary hypoplasia after primary cleft lip and palate (CLP) repair. However, each technique has limitations. AMDO can increase the anteroposterior length of the dental arch but provides limited anterior advancement and is mainly suitable for patients with localized anterior crossbite accompanied by crowding. In contrast, LFIDO allows significant advancement of the maxilla but cannot simultaneously create alveolar bone space. Large advancements may increase the risk of velopharyngeal insufficiency and external distractors may cause discomfort.

To address these limitations, we developed a combined distraction strategy integrating AMDO with LFIDO. With digital surgical planning, this approach aims to achieve substantial maxillary advancement while relieving the severe crowding in the upper dental arch and minimizing velopharyngeal dysfunction. The technique enables a comprehensive correction of complex cleft-related maxillary deformities in one treatment stage.

PREOPERATIVE PLANNING

Preoperative planning was performed using maxillofacial computed tomography (CT) data. Virtual surgical planning determined the magnitude and direction of maxillary segment repositioning. Based on digital simulation, osteotomy lines for AMDO and LFIDO were designed and optimal distractor positions were defined. ***(Figure 1)*** Particular

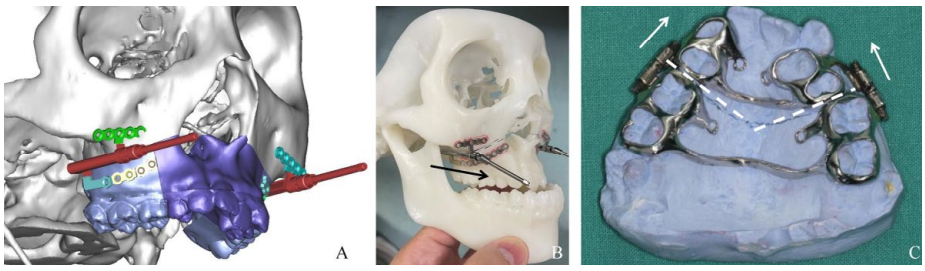


Figure 1 Combined distraction design – (A) Design of the LFIDO distractor and maxillary osteotomy lines; (B) LFIDO distractor; (C) AMDO distractor; Arrow: DO direction; Dashed line: AMDO osteotomy line.



Figure 2 Case outcomes - Facial profile, Overjet and cephalometric radiograph before (A, C, E) and after (B, D, F) distraction.

attention was paid to maintaining a safe distance from tooth roots and the greater palatine neurovascular bundle. The traction arms of the internal distractor were designed to be bilaterally parallel to ensure unobstructed movement of the anterior maxillary segment. Three-dimensional (3D)-printed guides were fabricated to assist AMDO osteotomy and accurate placement of the Le Fort I distractor that was pre-bent according to the digital design.

SURGICAL PROCEDURE

All procedures were performed intraorally. A vestibular incision was made along the maxillary mucobuccal fold, followed by subperiosteal dissection exposing the anterior wall, lateral wall, and nasal floor of the maxilla.

The screw-hole positioning guide for the Le Fort I distractor was fixed and drilling was performed. A Le Fort I osteotomy was then carried out along the planned osteotomy line while preserving the pterygomaxillary junction. Subsequently, the AMDO osteotomy guides were positioned and secured. With the assistance of the osteotomy guides, piezosurgery was used to create bilateral vertical cortical osteotomies without complete bone transection. Bilateral pterygomaxillary junctions were separated to fully mobilize the maxilla, followed by osteotomy of the anterior nasal spine and nasal septum. A reciprocating saw and osteotomes were used to separate the bone between the bilateral vertical osteotomy lines, allowing mobilization of the anterior maxillary segment. Pre-bent internal Le Fort I distractors were installed using the pre-drilled holes, with at least four titanium screws on each arm. AMDO distractors were then bonded to the dentition. Slight trial activation for both LFIDO and AMDO was conducted to confirm unobstructed bone segment movement. After hemostasis, the surgical site was irrigated and closed in layers.

DISTRACTION PROTOCOL

Distraction was initiated after a latency period of 5–7 days. AMDO was activated twice daily at 0.25 mm per activation. LFIDO was initially activated once daily with 0.17 mm advancement per session until AMDO reached the target position, after which it was increased to twice daily at the same rate. Mouth opening and wound healing were closely monitored throughout the process, and distraction parameters were adjusted according to bone segment movement. After distraction, the distractors were retained for 3–6 months to allow consolidation and stabilization of the newly formed bone.

CASE PRESENTATION

A 26-year-old female with a history of cleft lip repair, cleft palate repair, and alveolar bone grafting presented with severe skeletal Class III malocclusion caused by secondary maxillary hypoplasia. The combined distraction technique was performed.

After a 45-day distraction period, facial aesthetics improved. AMDO produced alveolar bone space of 6.8 mm on the left side and 6.9 mm on the right side, while LFIDO achieved 10.7 mm of maxillary advancement. Cephalometric analysis showed that the SNA and ANB angles increased from 71.3° to 80.1° and -6.8° to 3.1°, respectively. The overjet improved from -6.8 mm to 2.1 mm. The A-point advanced 7.38 mm, and the upper incisor point advanced 11.7 mm. The incisor display at rest changed from -3 mm to 1.8 mm. These outcomes closely matched the preoperative plan. ***(Figure 2)***

After 11 months of consolidation, the remaining malocclusion was corrected with orthodontic treatment alone. At the 24-month follow-up, a sagittal relapse of 2.3 mm at the A-point was observed, and the overjet decreased to 0.8 mm, which remained clinically acceptable. CT imaging demonstrated satisfactory bone healing without nonunion or root injury.

DISCUSSION

The combined distraction strategy enables substantial maxillary advancement while maintaining stability of the bone segments for secondary maxillary hypoplasia in patients with CLP. Furthermore, this approach minimizes the need for compromised mandibular setback, a common adjunct in

traditional orthognathic surgery. This is particularly beneficial for patients without mandibular prognathism, as it increases the magnitude of maxillary advancement while reducing surgical trauma. Importantly, this technique enables simultaneous gain of alveolar bone space to alleviate dental crowding while reducing the risk of velopharyngeal insufficiency, an advantage over conventional Le Fort I distraction osteogenesis alone.

Digital surgical planning plays a critical role in accurate osteotomy and precise placement of internal distractors. During distraction, the two distraction systems function independently. These advantages may improve surgical accuracy, reduce complications, and provide a practical solution for severe cleft-related maxillary deformities.

CONCLUSION

Combined anterior maxillary and Le Fort I distraction osteogenesis represent a safe and effective strategy for secondary maxillary hypoplasia in patients with CLP. This technique enables the simultaneous achievement of multiple clinical outcomes, including maxillary advancement, space creation for alignment of crowded teeth, and improvement of facial aesthetics within a single treatment stage.

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PSYCHOSOCIAL ASPECTS

BEYOND THE TIP OF THE ICEBERG: THE ROLE OF MENTAL HEALTH CARE IN OPTIMISING SURGICAL TREATMENT



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Clinical guidelines and research increasingly recognise mental health care support as an essential component of multidisciplinary craniofacial care. Nevertheless, access to psychological services remains highly variable across craniofacial teams. [1,2,3]. A lack of access to mental health care can have important implications for children, adults, and parents, and on their adjustment to a visible difference.

When a child is born with a craniofacial condition, parents are faced with challenges that often extend beyond ordinary caregiving expectations and over an extended period of time [4,5]. They must navigate uncertainty, absorb complex information, participate in difficult treatment decisions, and support their child through repeated medical interventions. Alongside treatment demands, parents and children must learn to cope with social reactions to a visible difference [6]. Living with an appearance that stands out from the crowd can be challenging at any age. Social interactions shape how we think and feel about ourselves. Experiences of staring, questions, assumptions, or exclusion can therefore affect self-perceptions and challenge feelings of belongingness and social acceptance.

Research and clinical experience have also highlighted the potential psychological impact of treatment itself. [7,8]. Repeated procedures, hospital admissions, and uncertainty surrounding outcomes can evoke intense emotional and physiological stress responses. These reactions may influence future treatment experiences and everyday functioning. In addition, patients and parents may struggle to fully understand treatment options or feel overwhelmed by decision-making. As a result, open, patient-centred communication is not merely a desirable addition to clinical care, it is fundamental to it.

Surgeons are uniquely positioned to influence these experiences. While time pressures and clinical demands are real, even small moments of genuine interest and empathy can significantly shape the patient experience. A patient once described the impact of a seemingly minor interaction with her surgeon. When asked, "How are you?", she automatically responded, "Good." Rather than moving on, the surgeon paused, looked her in the eye, and said: "I hear you saying 'good', but how are you really doing?" The question itself was important, but equally important was the surgeon's non-verbal communication. The patient felt that her answer genuinely mattered. She responded more honestly, and the consultation developed into a more meaningful and patient-centred conversation.

These interactions become particularly important in the context of appearance-altering surgery. Surgical procedures can improve function, appearance, and quality of life, but they can also have profound implications for identity, self-image, and self-esteem. Therefore, patients need to be well prepared for a surgical change in appearance. Even when surgery has been requested by the patient and the surgeon is happy with the outcome, the person looking back from the mirror may not immediately match the individual's inner sense of self.

Preparing patients for this possibility should be considered a central part of treatment. Health care professionals have a responsibility to provide information that is both realistic and understandable. Discussions should include not only the anticipated physical outcome, but also the emotional and social impact of a change in appearance. Equally important is creating space for patients to express concerns, hopes, uncertainty, or disappointment.

When patients experience dissatisfaction following surgery, the burden can be substantial. This is especially true if they feel their concerns are dismissed or misunderstood. A technically successful result does not automatically translate into psychological satisfaction. If there is little room for disappointment, or concerns are met with minimisation, patients may feel isolated at a time when they are particularly vulnerable. Over time, this can contribute to difficulties with self-esteem, social functioning, quality of life, and mental health. In contrast, acknowledging and validating a patient's experience can strengthen trust, support adjustment, and facilitate appropriate follow-up care.

An iceberg provides a useful metaphor for understanding why psychological support is so important in craniofacial treatment pathways.

The visible portion of the iceberg - above the water - can represent surgery and other medical interventions. These are central components of treatment, and measurable and observable aspects of care. Yet most surgeons have encountered situations where patients were less satisfied than expected following what they felt was a favourable surgical outcome. Similarly, some patients may decline a treatment offer, feeling comfortable with their appearance as it is.

These situations serve as a reminder that treatment decisions and outcomes are shaped by factors that are not immediately visible. Beneath the surface lies the far larger portion of the iceberg: emotions, coping strategies, expectations, identity, family experiences, relationships, and previous encounters with health care. These factors are often harder to identify and quantify than surgical outcomes, making them easier to overlook. However, they profoundly influence how patients experience treatment, make decisions, recover from interventions, and adapt over time.

Psychological support belongs to this hidden but essential part of the iceberg. Patients and families may need support to make sense of their experiences, articulate their goals and concerns, prepare for change, and develop effective coping strategies. Importantly, psychological care is not separate from medical care. Rather, it provides the foundation that enables the visible aspects of treatment to achieve their full potential.

For surgeons working within multidisciplinary teams, acknowledging what lies beneath the surface means recognising that psychological factors are integral to patient outcomes. Sometimes the most meaningful intervention is not yet another procedure, but a question, an open conversation, or a referral that helps a patient feel understood.

Ultimately, high-quality craniofacial care requires attention to both the visible and invisible aspects of the patient experience. Surgery may be one of the most visible elements of treatment, but long-term adjustment, wellbeing, and quality of life are shaped by much more than surgical results alone. What lies beneath the surface is not secondary to treatment success. It is foundational to it.

REFERENCES

1. *Feragen KJB, Gavelle P, Millgård M, Kljajić M. A European Survey on Access to Mental Health Care Services Within ERN CRANIO. J Craniofac Surg. 2025 Nov-Dec 01;36(8):2984-2989.*
2. *Hood MM, Cradock MM, Vander Wal JS. A survey of psychological assessment on interdisciplinary craniofacial teams. Cleft Palate Craniofac J 2011;48:425–444*
3. *Scott JK, Leary SD, Ness AR, et al. Centralization of services for children born with orofacial clefts in the United Kingdom: a cross-sectional survey. Cleft Palate Craniofac J 2014;51:e102–e109*
4. *Stock NM, Blaso D, Hotton M. Caring for a Child with a Cleft Lip and/ or Palate: A Narrative Review. The Cleft Palate Craniofacial Journal. 2025;62(11):1947-1974.*
5. *Thornton M, Harcourt D, Deave T, Kiff J, White P, Williamson H. Cross-condition risk and protective factors for psychosocial distress in parents and carers of children and young people with appearance-affecting conditions and injuries. Body Image. 2024 Dec;51:101768.*
6. *Partridge J. Psycho-social reflections on craniofacial morphogenesis. Semin. Cell Dev. Biol, 2010, 21(3), 333-338.*
7. *Crerand CE, Feragen KB, Johns AL, et al. Pediatric medical traumatic stress in individuals with craniofacial conditions. Persp ASHA SIG 2024;9:1–12*
8. *Johns AL, Stock NM, Costa B, Billaud Feragen K, Crerand CE. Psychosocial and Health-Related Experiences of Individuals with Microtia and Craniofacial Microsomia and Their Families: Narrative Review Over 2 Decades. Cleft Palate Craniofac J. 2023 Sep;60(9):1090-1112.*

SPEECH PATHOLOGY

SUPPORTING COMMUNICATION FROM THE START: THE IMPORTANCE OF EARLY INTERVENTION

A UK 4 CENTRE PROJECT



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Contents of a "babble" bag given to families at the Alder Hey face-to-face group, kindly sponsored by the Headlines Craniofacial Support Charity.

The UK has four Highly Specialised Craniofacial Units in England and one in Scotland providing expert care for individuals with craniofacial conditions. The Speech and Language Therapy teams across the four English centres work collaboratively to develop assessment tools, advance therapeutic approaches, and undertake multicentre research, improving clinical practice and enhancing care for patients and their families.

The early years of life are a period of rapid communication development. Through interactions with parents and caregivers, infants develop the foundations for speech, language, and social communication that underpin later educational achievement, social relationships, and emotional wellbeing [2]. For children with craniofacial conditions, including those with an associated syndrome and other complex craniofacial differences, early support and advice can play an important role in promoting optimal speech and language outcomes.

A growing body of research shows that children with craniofacial conditions are at increased risk of difficulties affecting speech, language, and broader neurodevelopmental skills [5,1]. Children with syndromic craniosynostosis have higher rates of speech and language delay and learning difficulties, while those with isolated

craniosynostosis may also experience communication and cognitive challenges [5]. Early identification and intervention are therefore essential components of multidisciplinary craniofacial care.

Intervening during the first years of life takes advantage of heightened neuroplasticity, when developing neural networks are particularly responsive to environmental experiences [6]. Evidence from speech and language therapy indicates that parent-implemented, naturalistic interventions can improve children's communication skills and enhance parental confidence. These approaches recognise parents as a child's primary communication partner and embed communication opportunities within everyday activities and routines [7].

In addition to supporting children's development, early intervention programmes can help families access information, develop practical strategies, and connect with others with shared experiences. Group-based approaches provide peer support and collaborative learning, helping to build confidence and resilience in families navigating complex healthcare journeys [4].

	Alder Hey	Birmingham	Great Ormond Street	Oxford
Number of groups offered	5	8	14	1

Table: Showing number of groups offered. Some Craniofacial centres have delivered more groups due to larger patient populations and having established the groups earlier, while others have been limited by staffing capacity.

EARLY COMMUNICATION GROUPS: DELIVERY ACROSS CLINICAL CENTRES

Reflecting the growing recognition of the importance of early communication support, the Speech and Language Therapy teams at four UK craniofacial centres from children's hospitals in Birmingham, Liverpool, London and Oxford have developed early intervention groups to support young children and their families. Although differing in structure and delivery, these programmes share a common goal: empowering families and optimising communication outcomes from the earliest stages of development.

At Alder Hey Children's Hospital in Liverpool, early communication groups are delivered both virtually and face-to-face. Parents/carers with non-syndromic craniofacial conditions attend virtual groups, whereas those with syndromic and more complex presentations participate in multidisciplinary face-to-face groups delivered by Speech and Language Therapy, Clinical Psychology and Dental Therapy. This integrated approach enables families to receive coordinated support across communication, psychological wellbeing and oral health within a single setting [3].

The Birmingham Children's Hospital team offers virtual group sessions, with flexibility to provide individual one-to-one support for children with more complex needs where this is considered most appropriate. This approach allows intervention to be tailored to individual developmental profiles and family circumstances.



Face-to-face groups allowed for interaction with patients and families.

Great Ormond Street Hospital in London delivers both syndromic and non-syndromic groups virtually, providing families across a wide geographical area with access to specialist support and opportunities to connect with others with similar experiences.

The Oxford Craniofacial Unit delivers a virtual group session for children with non-syndromic craniofacial conditions, providing families with guidance and strategies to support communication development within everyday routines.

FEEDBACK AND FUTURE PLANNING

Feedback from families has been overwhelmingly positive.

Parent quotes:
"That was such a useful session, and I have taken away a lot of top tips to use at home."
"I enjoyed learning more and meeting other kids with Cranio."

Engaging families early in their child's complex medical and surgical journey builds strong therapeutic relationships, fostering trust and encouraging families to seek support when needed. Families valued the opportunity to ask questions about their child's development at an early stage, particularly when access to community speech and language support is limited.

Parents who attended face-to-face groups valued the opportunity to learn in a welcoming, supportive environment, with many highlighting the benefits of meeting other children and families with craniofacial conditions. Some families attending face-to-face groups exchanged contact details, allowing relationships and support networks to continue beyond the sessions. Families particularly valued the multidisciplinary nature of the syndromic group sessions and the opportunity to discuss topics that are often difficult to cover during routine clinic appointments. The teams also recognised the importance of ensuring communication strategies are relevant to children with a wide range of abilities, including those who are currently non-verbal.

Feedback through pre- and post-group parents' questionnaires continue to inform future planning. Subsequent groups will provide more opportunities for family discussion and place greater emphasis on practical strategies to support communication at home. Overall, the positive response reinforced the value of bringing families together and highlighted the important role of peer support within the craniofacial community.

Future work could include a pilot study to explore the effectiveness of this early intervention and the impact on parents' understanding of their child's speech and language development.

REFERENCES

1. *Faasse, M., Mathijssen, I.M. and on Craniosynostosis, E.C.W.G., 2022. Guideline on treatment and management of craniosynostosis: patient and family version. The Journal of Craniofacial Surgery, 34(1), p.418.*
2. *Law et al. (2017) Law, J., Charlton, J., Dockrell, J., Gascoigne, M., McKean, C. and Theakston, A., 2017. Early Language Development: Needs, provision, and intervention for preschool children from socio-economically disadvantage backgrounds. London: Education Endowment Foundation, 204.*
3. *Mathijssen, I.M., 2021. Updated guideline on treatment and management of craniosynostosis. Journal of Craniofacial Surgery, 32(1), pp.371-450.*
4. *Roulstone, S., Wren, Y., Bakopoulou, I. and Lindsay, G., 2012. Interventions for children with speech, language and communication needs: an exploration of current practice. Child Language Teaching and Therapy, 28(3), pp.325-341.*
5. *Shipster, C., Hearst, D., Somerville, A., Stackhouse, J., Hayward, R. and Wade, A., 2003. Speech, language, and cognitive development in children with isolated sagittal synostosis. Developmental medicine and child neurology, 45(1), pp.34-43.*
6. *Shonkoff, J.P., Phillips, D. and National Research Council, 2000. Committee on integrating the science of early childhood development. From neurons to neighborhoods: The science of early childhood development, p.39.*
7. *Tosh, R., Arnott, W. and Scarinci, N., 2017. Parent-implemented home therapy programmes for speech and language: a systematic review. International journal of language & communication disorders, 52(3), pp.253-269.*

ORTHODONTIC CORNER

ORTHODONTIC PRE-SURGICAL PROTOCOL FOR ORTHOGNATHIC SURGERY IN UCLP PATIENTS FOCUSING ON UPPER ARCH SYMMETRY



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INTRODUCTION

UCLP patients have an indication for orthognathic surgery in approximately 20% to 66% of cases.[1] This occurs mainly due to altered sagittal and transverse maxillary growth, which is influenced by primary plastic surgeries. [2]

In addition to altered maxillary growth, the dentition is also altered, with agenesis, supernumerary teeth, shape anomalies, dental transpositions, and ectopic eruptions being common. [3]

The sum of these factors makes the orthodontic surgical preparation of these patients a challenge for the orthodontist.

We will illustrate a proposed orthodontic preparation focused on the radical correction of upper arch symmetry as a way to obtain a final post-surgical occlusion with aesthetic and functional excellence.

ORTHODONTIC MANAGEMENT

Figure 1 illustrates the sequence of 4 clinical cases of UCLP patients who initially presented with asymmetry between the right and left sides of the maxillary



Figure 1- (a-p) UCLP patients with different conditions of maxillary asymmetry. The 4 cases were orthodontically prepared for orthognathic surgery with correction of the asymmetry using the center of the maxilla as a reference. The teeth that will represent the central incisors at the end of treatment should be in the center of the maxilla, and those that will represent the lateral incisors and canines in sequence, towards the posterior region of the arch. The six teeth should be positioned symmetrically to each other, within an ellipse.

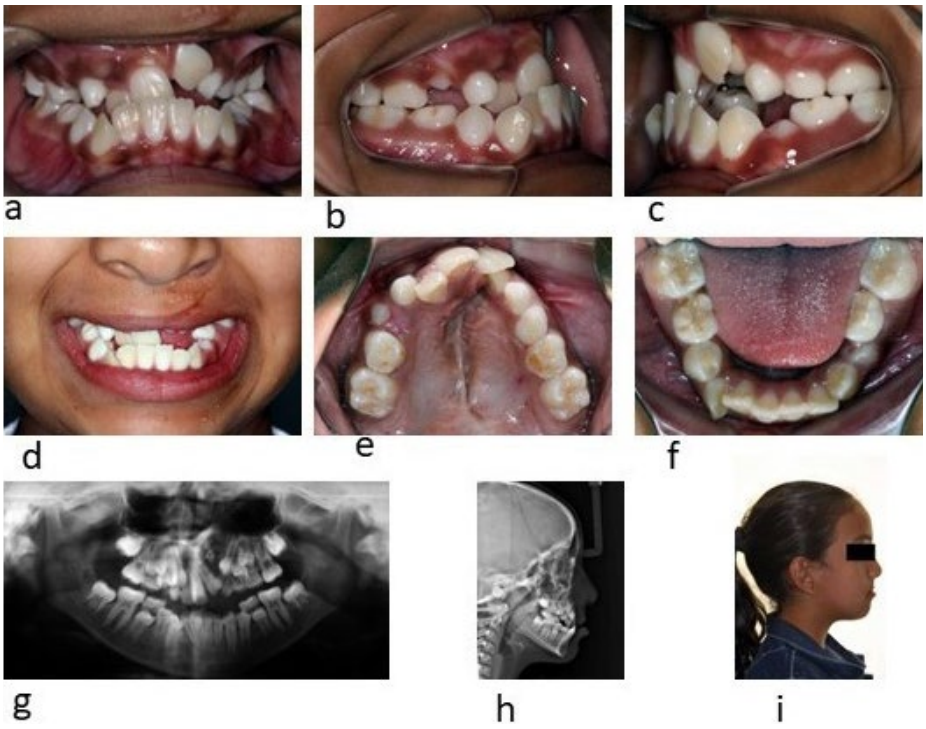


Figure 2 - (a-i) UCLP patient, 9 years old, in mixed dentition, with severe Class III relationship, maxillary atresia, absence of the lateral incisor in the cleft area and severe anterior superior and inferior crowding.



Figure 3 - (a-c) Result of rapid maxillary expansion (RME) (a), and extraction of teeth 34 and 44 (b) and tooth 12, already in the fixed orthodontic retention phase post-RME (c)

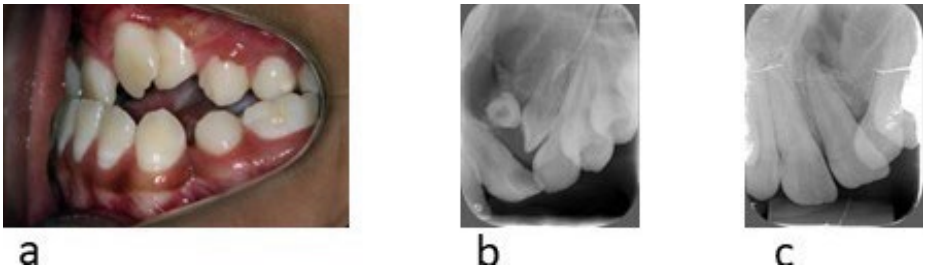


Figure 4- (a-c) Position of tooth 23 before ABG (a and b) and result of tertiary ABG (c).

arch. These cases, in addition to presenting a sagittal maxillary deficiency large enough to justify orthognathic surgery, had agenesis, ectopic eruptions, and, most importantly, asymmetry between the right and left sides of the upper dental arch.

The orthodontic/surgical preparation aimed to correct these asymmetries in the anterior region, even if this required the extraction of lateral incisors and premolars, cosmetic transformation of lateral incisors as central incisors, and canines as lateral incisors, with a consequent reduction in arch length.

At the end of the preparation, the six upper anterior teeth presented good symmetry with each other, with the representatives of the central incisors in the center of the maxilla, the representatives of the lateral incisors symmetrical with each other, as well as the representatives of the canines, also symmetrical with each other, regardless of their origin, since they can be reshaped with restorative dentistry or prosthetics..[4] In the posterior region, this symmetry between the right and left sides is not important; the molars can be perfectly positioned in different sagittal relationships in occlusion on the right and left sides.

At the end of treatment, all cases presented a functional and aesthetic occlusal relationship. [4]

We will describe this protocol in a case followed from mixed dentition, at 9 years of age, until orthodontic completion, at 20 years of age.

The patient had UCLP and presented with a severe Class III relationship with maxillary atresia, absence of the lateral incisor in the cleft area, and severe anterior and inferior crowding ***(Figure 2)***.

The case was prepared for alveolar bone graph (ABG) with rapid maxillary expansion (RME), tooth 12 was extracted to allow the eruption of tooth 13, and teeth 34 and 44 were extracted to reduce crowding in the lower arch ***(Figure 3)***.

The beginning of the eruption of tooth 23 prevented the performance of the secondary ABG. After the complete eruption of tooth 23, the tertiary or late ABG was performed ***(Figure 4)***.

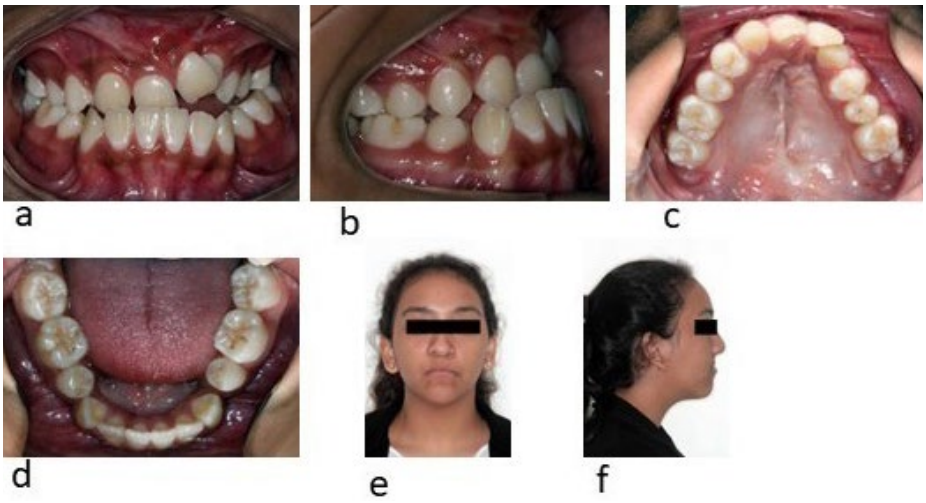


Figure 5 - (a-f) Patient at 16 years old, ready to start orthodontic treatment with a view to orthognathic surgery. Severe Class III relationship, with asymmetry in the upper arch, with marked deviation of the upper midline to the left. (a, c)

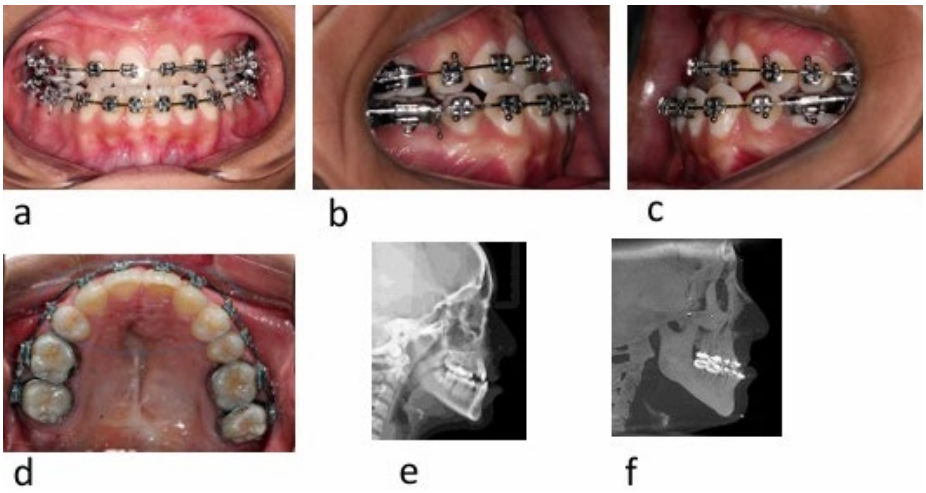


Figure 6- (a-f) Result of pre-surgical orthodontic treatment, with full sagittal decompensation (a-c) and obtaining good symmetry between the 6 anterior upper teeth (d). Improvement in the sagittal position of the upper and lower incisors. (e,f)

At the opportune moment to begin orthodontic/surgical preparation, closer to the end of craniofacial growth, at age 16, the patient was ready to begin orthodontic treatment with a view to orthognathic surgery ***(Figure 5)***.

To correct the upper midline to the right, tooth 14 was extracted. The plan was to keep the upper canines as lateral incisors and the first premolars as canines. The upper and lower fixed appliances were bonded to promote alignment, leveling, midline correction, and improve the sagittal positioning of the upper and lower incisors, which were slightly protruded ***(Figure 6)***.

During orthodontic preparation, the 3rd molars were extracted, and after the placement of rectangular steel arches and evaluation of the models, the case was ready for orthognathic surgery. Note the correction of symmetry between the right and left sides of the maxilla, with the 6 anterior-superior teeth symmetrical to each other and divided by the center of the maxilla ***(Figure 6)***.

The surgery was performed at 19 years of age and, after minor orthodontic adjustments to improve intercuspation, the appliance was removed.

The facial photos and final radiographs show the aesthetic and functional correction obtained after applying the suggested treatment protocol. The correct inclination of the incisors promoted good lip support, and the teeth adjacent to the cleft have good bone and periodontal support ***(Figure 7)***.

DISCUSSION

The surgical orthodontic preparation of UCLP patients has some particularities compared to patients without cleft.

In UCLP patients, during orthodontic preparation for surgical correction of Class III malocclusion, the upper incisors are often palatalized due to scarring from primary plastic surgeries and must be protruded, unlike the preparation of patients without clefts. [5]

Another important peculiarity is the need for corrections of asymmetries in maxillae that already present dental agenesis and limitations in sagittal arch length. [6]

In the illustrated case, the patient received maxillary transverse adjustment in the mixed dentition; however, the eruption of the left canine, adjacent to the cleft, before the secondary ABG, prevented the surgery from being performed at the ideal time. [7] Still, it was possible to obtain good bone filling in the alveolar ridge even with the performance of the tertiary ABG of the iliac crest, which allowed the movement of tooth 23 as a lateral incisor.

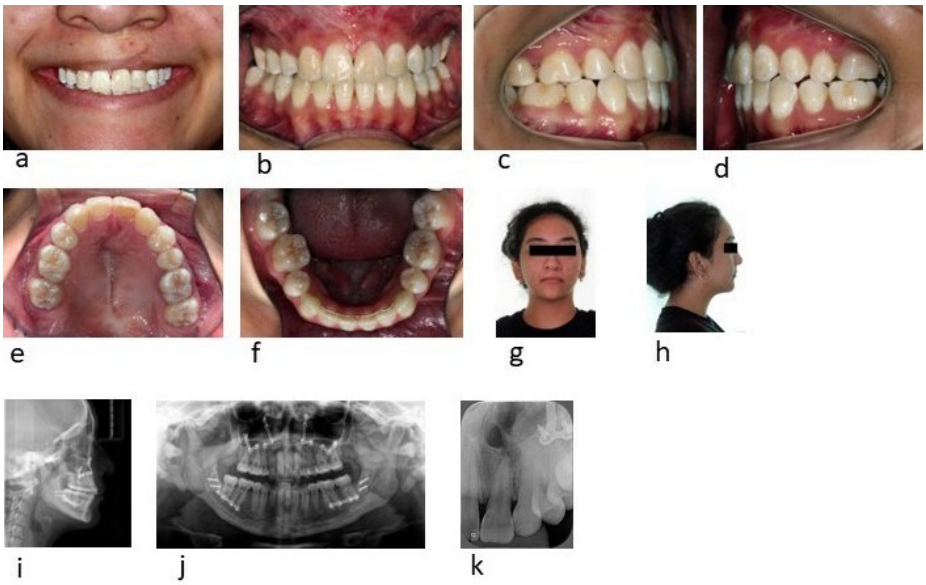


Figure 7- (a-k) Patient at 20 years old, after orthodontic completion. Smile aesthetic results (a), Final occlusion with coincident midlines (a,b), canine teeth as lateral incisors (a,b,c,d), right molar in class II (c) and left molar in class I (d). The six upper and lower anterior teeth are well positioned and symmetrical to each other (e,f). Frontal and profile views and radiographs showing the correction obtained (g,h,i,j). Periapical X-ray shows the rehabilitated cleft region with good bone and periodontal support.

Even with the extraction of tooth 12, in the mixed dentition, after the RME, the eruption of tooth 13 in the region prevented the midline from accommodating to the right at the end of the development of the dentition.

In the lower arch, the extraction of teeth 34 and 44 allowed the spontaneous correction of the crowding present and prevented the 2nd premolars from becoming impacted, or erupting outside the ridge.

These small interventions in the mixed dentition, together with the preparation of the maxilla for ABG, greatly facilitate future orthodontic/surgical preparation. [8]

After ABG surgery, the patient underwent a craniofacial growth control protocol, and the fixed appliance was only installed with a view to preparing for orthognathic surgery closer to the end of craniofacial growth, to avoid relapses related to mandibular growth after cases operated on prematurely.

Since the bone defect had already been treated at the ideal time, as well as the maxillary atresia and the severe crowding present in the mixed dentition, the surgical orthodontic preparation was simplified and consisted of the extraction of tooth 14 to allow correction of the upper midline to the right and improvement of the sagittal positioning of the incisors.

Orthodontic improvement of the symmetry of the anterior superior teeth allows for ideal surgical sagittal correction, without the need for asymmetrical advancements with wide Yaw movements, which worsen the smile and occlusion in the posterior region.

The case was completed with canines as laterals, with good vertical and horizontal overjet, coincident midlines, and molars in different sagittal relationships, the right in Class II and the left in Class I.

The facial aesthetics were harmonious and the smile was within aesthetic standards, with the patient very satisfied with the treatment results.

CONCLUSION

The orthodontic/surgical preparation of UCLP patients goes far beyond simple sagittal decompensation and should be structured from the mixed dentition stage. Full correction of anterior superior asymmetry allows for ideal surgical correction and orthodontic finishing with adequate aesthetic and functional parameters.

REFERENCES

1. *Hathaway R, Daskalogiannakis J, Mercado A, Russell K, Long RE Jr, Cohen M, et al. The Americleft study: an inter-center study of treatment outcomes for patients with unilateral cleft lip and palate, part 2. Dental arch relationships. Cleft Palate Craniofac J 2011;48:244-51.*
2. *Turri de Castro Ribeiro T, Petri Feitosa MC, Almeida Penhavel R, et al. Extreme maxillomandibular discrepancy in unilateral cleft lip and palate: longitudinal follow-up in a patient with mandibular prognathism. Am J Orthod Dentofacial Orthop. 2018;154:294–304.*
3. *Celikoglu M, Buyuk SK, Sekerci AE, Cantekin K, Candirli C. Maxillary dental anomalies in patients with cleft lip and palate: a cone beam computed tomography study..J Clin Pediatr Dent. 2015 Winter;39(2):183-6.*
4. *Kiemle Trindade P A ; FERREIRA, G. R. ; PENHAVEL, R. A. ; RIBEIRO, T. T. C. . Cirurgia Ortognática. In: Kiemle Trindade, Inge Elly; Kiemle Trindade- Suedam, Ivy; Kiemle Trindade, Sergio Henrique; Martins. (Org.). Tratado de Fissuras Labiopalatinas- Avanços no Diag.e Trat.interdisciplinar. 1ed.Rio de Janeiro: Thieme, 2024, v. 1, p. 310-355.*
5. *Baik H S. Presurgical and Postsurgical Orthodontics in Patients With Cleft Lip and Palate. The Journal of Craniofacial Surgery & Volume 20, Supplement 2, September 2009.*
6. *Lin, Y, et al. Cone-beam computed tomography–synthesized cephalometric study of operated unilateral cleft lip and palate and noncleft children with Class III skeletal relationship. Am J Orthod Dentofacial Orthop 2016;150:802-10.*
7. *Bergland O, Semb G and Abyholm FE. Elimination of the residual alveolar cleft by secondary bone grafting and subsequent orthodontic treatment. Cleft Palate Journal. 1986; 23: 175–205*
8. *Ribeiro TTC, Miranda F. Orthodontic pre-surgical planning for orthognathic surgery in patients with cleft lip and palate: key considerations. Seminars in Orthodontics 31 (2025) 685–692.*

YOUNG SURGEONS' EXPERIENCE

MENTORSHIP UNDER SCARCITY



KARAM ALLAM
EGYPT

Mentorship failure in surgery is rarely dramatic. More often, it happens quietly. A trainee sends a draft, asks a question, or proposes a project, and the mentor is pulled from the operating room to clinic, from clinic to an emergency, and then to the administrative work that waits at the end of the day. A response is delayed. Then another. Eventually, the trainee stops sending work. Usually, it is not because the ambition has disappeared. It is because progress no longer seems possible.

The consequences are easy to overlook. The operating list continues, patients are treated, and the department functions. Yet fewer trainees remain engaged in academic work, fewer develop confidence as teachers, and fewer are prepared to take on leadership roles later in their careers.

This matters particularly in craniofacial surgery. Rare deformities, staged reconstruction, difficult complications, and long-term follow-up cannot be learned from operative exposure alone. Much of the specialty is apprenticeship. Trainees learn by watching how experienced surgeons make decisions, discuss uncertainty, communicate with families, respond when a reconstruction does not go as planned, and, equally importantly, when they decide not to operate.

One of the commonest misunderstandings in surgical training is to regard supervision and mentorship as the same thing. They are not. Supervision is essential for patient safety: the senior surgeon oversees the work, corrects errors, and assumes responsibility when necessary. Mentorship has a longer horizon. It helps a trainee develop judgment, confidence, academic maturity, and eventually the ability to make difficult decisions independently. A trainee can therefore be well supervised and still be poorly mentored.

The problem becomes more obvious when resources are limited. Research opportunities, conference travel, fellowships, and publications may be scarce. Under these circumstances, mentorship can unintentionally become concentrated around a small number of visible or highly active trainees, while others gradually disengage. Authorship can become particularly sensitive when publications influence career progression. Most of these problems do not arise from bad intentions. They develop through delayed communication, unclear expectations, and projects that lose momentum simply because nobody has time to keep them moving.

Hierarchy can make this harder. Surgical hierarchy has an important role, particularly in acute care. But it should not prevent a trainee from asking a question, admitting uncertainty, or challenging an assumption respectfully. A trainee who is afraid of appearing weak will often hide uncertainty rather than discuss it. That is a training problem, not a personality problem.

Time remains the greatest practical obstacle. Emergency work, staffing shortages, administrative duties, and fatigue leave little protected space for mentorship. Even committed mentors struggle when mentorship is expected to happen only after the clinical work is finished.

The answer does not necessarily

require major institutional reform. Consistency may matter more than elaborate programmes. A regular mentorship meeting, even if brief, can prevent projects from disappearing. Authorship expectations should be discussed early. Senior trainees can help guide junior colleagues, and responsibility for mentorship should be shared across the faculty rather than resting on one or two individuals.

The aim is not to remove hierarchy or pretend that surgical training can be made comfortable. It cannot. Training in surgery will always involve pressure, fatigue, unequal experience, and difficult decisions. The aim is simply to ensure that mentorship is not the first thing sacrificed when the service becomes busy.

In craniofacial surgery, some of the most important lessons are learned away from the operating table. Judgment, timing, restraint, management of complications, and communication with families develop over years of observation and discussion. In a field where experience is accumulated slowly, mentorship remains one of the most important ways that experience - and responsibility - are passed from one generation of surgeons to the next.

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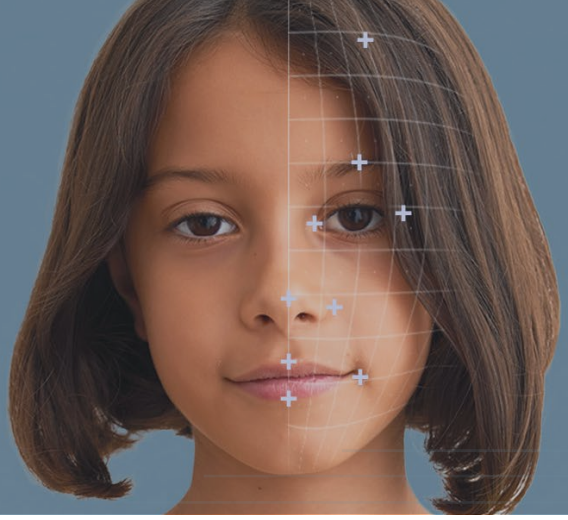
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Location: Utrecht, Netherlands
Dates: June 3-5, 2027
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Dates: 26-29 September 2028

PRE-CONGRESS RESIDENTS' DAY
September 25, 2028
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2028 ESCFS
European Society of Craniofacial Surgery has been postponed from September 2026 Ankara, Turkey

ISCFS 2027
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Location: Rotterdam, Netherlands
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To submit a meeting to the calendar in our next issue, send the following information to admin@iscfs.org: Meeting Title, Location, Dates, Website.

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