This monthly Current Awareness Bulletin is produced by the Healthcare Library to provide Salisbury NHS Foundation Trust staff with a range of resources to support practice. It includes recently published guidelines and research articles, news and policy items, and details of new library resources.

**Athens**

To access journal articles that are available in full text you will need to have a username and password for Athens. To register for an Athens account click [here](#).

For further information or support Salisbury staff can contact the Healthcare Library, SDH Central, Salisbury District Hospital, Salisbury, Wiltshire SP2 8BJ. 01722 429054 or 01722 336262 ext 4430, Library.office@salisbury.nhs.uk, or visit the library website at [www.library.salisbury.nhs.uk](http://www.library.salisbury.nhs.uk)

### Guidelines

**The Royal College of Paediatrics and Child Health**

*Palate examination: Identification of cleft palate in the newborn - best practice guide*

New guidance launched

### Cleft Lip and Palate Resources on UpToDate

[UpToDate®](#)

*Etiology, prenatal diagnosis, obstetrical management, and recurrence of orofacial clefts*

You may need an Athens username and password. To register for an Athens account click [here](#).

### Cleft Palate-Craniofacial Journal – Latest Issue

**Cleft Palate-Craniofacial Journal**

ISSN: 1055-6656 Latest issue available from Allen Press in [Journals@Ovid (Athens Authorization)](#)

### Journal Articles

Please click on the blue links (where available) to access full text.

You may need an Athens username and password. To register for an Athens account click [here](#).

If you have any difficulty accessing the full text articles, or if you would like us to obtain any of the articles for you, please contact the Healthcare Library.

**Titles highlighted in green may be of particular interest to Speech and Language Therapists**

**Titles highlighted in orange may be of particular interest to Clinical Psychologists – none this month**

**Table of Contents**

1. A case report of multidisciplinary treatment of an adult patient with bilateral cleft lip and palate.
2. A systematic review comparing furlow double-opposing z-plasty and straight-line intravelar veloplasty methods of
3. Accelerated Wound Closure In Vitro by Fibroblasts from a Subgroup of Cleft Lip/Palate Patients: Role of Transforming Growth Factor-alpha.
4. An alternative clinical approach to achieve greater anterior than posterior maxillary expansion in cleft lip and palate patients.
5. An analysis of deformities in revision surgeries for secondary unilateral cleft lip.
6. Assessment of pharyngeal airway volume in adolescent patients affected by bilateral cleft lip and palate using cone beam computed tomography.
7. Can occlusal evaluation of children with unilateral cleft lip and palate help determine future maxillofacial morphology?
8. Comparison of hyoid bone position among cleft lip palate and normal subjects
9. Comparison of tooth development stage of the maxillary anterior teeth before and after secondary alveolar bone graft: Unilateral cleft lip and alveolus vs unilateral cleft lip and palate.
12. Correction of the Vestibular Web during Primary Repair of Unilateral Cleft Lip.
13. Demineralized bone matrix for alveolar cleft management.
14. Diagnosis and management of patients with clefts: a comprehensive and interdisciplinary approach.
15. Does contribution of extended vomer flap to palatoplasty affects speech results.
16. Early lexical characteristics of toddlers with cleft lip and palate.
17. Effects of lip repair on maxillofacial morphology in patients with unilateral cleft lip with or without cleft palate.
20. Evaluation of transverse maxillary expansion after a segmental posterior subapical maxillary osteotomy in cleft lip and palate patients with severe collapse of the lateral maxillary segments.
22. Facial growth evaluation of complete unilateral cleft lip and palate operated patients: a cleft reference center in Paraiba, Brazil, using the "GOSLON" yardstick.
24. Fracture of the vomero-premaxillary junction in a repaired bilateral cleft lip and palate patient.
25. Functional Analysis of SPECC1L in Craniofacial Development and Oblique Facial Cleft Pathogenesis.
27. Impact of Early Synchronous Lip and Palatal Repair on Speech.
33. Joint testing of genotypic and gene-environment interaction identified novel association for BMP4 with non-syndromic CL/P in an Asian population using data from an International Cleft Consortium.
34. Lateral cleft lip and macrostomia: Case report and review of the literature.
35. Le fort I maxillary advancement using distraction osteogenesis.
36. Morphometric Analysis of Brain Shape in Children With Nonsyndromic Cleft Lip and/or Palate.
37. Orthodontic considerations for maxillary distraction osteogenesis in growing patients with cleft lip and palate using internal distractors.
38. Role of angiogenesis-related genes in cleft lip/palate: Review of the literature
39. Spatial and temporal clustering of isolated cleft lip with or without cleft palate in Poland.
40. Speech outcome in complete unilateral cleft lip and palate - a comparison of three methods of the hard palate closure.
41. Speech therapy where there are no speech therapists: the task force for the american cleft palate-craniofacial association.
43. Submucous cleft palate: a systematic review of surgical management based on perceptual and instrumental analysis.
44. Surgical impact and speech outcome at 2.5 years after one- or two-stage cleft palate closure
45. The 70-degree telescope as a teaching tool for cleft palate repair and pharyngoplasty surgery
46. The effects of lip revision surgery on nasolabial esthetics in patients with cleft lip.
47. Three-dimensional Cephalometric Analysis of Adolescents With Cleft Lip and Palate Using Computed Tomography-Guided Imaging.
48. Tongue-palate contact during selected vowels in children with speech sound disorders.
49. Transillumination of the occult submucous cleft palate.
50. Ultrasound-guided surgery of particulate cancellous bone and marrow from the iliac crest for cleft palate.
51. Usefulness of videofluoroscopic swallow study in treacher collins syndrome with cleft palate: a case report.
52. Vertical maxillary growth after two different surgical protocols in unilateral cleft lip and palate patients.

1. Title: A case report of multidisciplinary treatment of an adult patient with bilateral cleft lip and palate.
   Citation: Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(711-21), 1055-6656;1545-1569 (2014 Nov)
   Author(s): Fukunaga T, Honjo T, Sakai Y, Sasaki K, Takano-Yamamoto T, Yamashiro T
   Language: English
   Abstract: This is a case report about the successful orthodontic treatment of a bilateral cleft lip and palate patient by using a combination of bone grafting and subsequent prosthodontic rehabilitation. An adult patient with a bilateral cleft lip and palate presented with a concave profile, anterior and lateral crossbite, a markedly deep overbite, and residual bilateral alveolar clefts. His jaw movement patterns were unstable and irregular due to his collapsed bite. Orthodontic treatment with bilateral bone grafting improved his concave profile by downward and backward rotation of the mandible within the freeway space, and optimum occlusion and functionally stable and smooth jaw movements were obtained. After a 6-year retention period, no skeletal relapse could be detected, and his occlusal stability was satisfactory.
   Publication type: Journal Article
   Source: MEDLINE
   Full text: Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal

2. Title: A systematic review comparing furlow double-opposing z-plasty and straight-line intravelar veloplasty methods of cleft palate repair.
   Citation: Plastic & Reconstructive Surgery, November 2014, vol./is. 134/5(1014-22), 0007-1226;1529-4242 (2014 Nov)
   Author(s): Timbang MR, Gharb BB, Rampazzo A, Papay F, Zins J, Doumit G
   Language: English
   Abstract: BACKGROUND: A systematic review was conducted to compare the speech outcomes and fistula rates following repair of the cleft palate with Furlow double-opposing Z-plasty and straight-line intravelar veloplasty techniques.METHODS: A systematic search of the English literature published in the MEDLINE, Ovid, and Embase electronic databases was performed using the following keywords: "cleft palate," "intravelar veloplasty," "velopharyngeal insufficiency," and "speech outcome." The exclusion criteria were as follows: syndromic patients, no description or poor description of the technique used, data not stratified by cleft palate type, two-stage cleft palate
repair, average age at repair younger than 9 months or older than 18 months, and age at the last follow-up younger than 4 years. Statistical analysis was used to compare the rate of secondary operations and the incidence of velopharyngeal insufficiency. RESULTS: Twelve studies satisfied the inclusion criteria. In the isolated cleft palate group, the mean failure rates were 9.7 and 16.5 percent for Furlow double-opposing Z-plasty and straight-line intravelar veloplasty closure, respectively. In the unilateral cleft lip-cleft palate group, the mean failure rates were 11.1 and 17.1 percent for Furlow and straight-line intravelar veloplasty closure, respectively. The difference in the odds of requiring secondary surgery in the straight-line intravelar veloplasty repair group versus the Furlow group was statistically significant (p = 0.03) in unilateral cleft lip-cleft palate. CONCLUSION: This systematic review indicated an increased incidence of velopharyngeal insufficiency as revealed by higher odds of secondary operations in the straight-line intravelar veloplasty repair of unilateral cleft lip-cleft palate when compared with Furlow Z-plasty.

Publication type: Journal Article
Source: MEDLINE
Full text: Available Journal of reconstructive microsurgery at Plastic and Reconstructive Surgery

3. Title: Accelerated Wound Closure In Vitro by Fibroblasts from a Subgroup of Cleft Lip/Palate Patients: Role of Transforming Growth Factor-alpha.
Citation: PLoS ONE [Electronic Resource], 2014, vol./is. 9/10(e111752), 1932-6203;1932-6203 (2014)
Author(s): Beyeler J, Schnyder I, Katsaros C, Chiquet M
Language: English
Abstract: In a fraction of patients surgically treated for cleft lip/palate, excessive scarring disturbs maxillary growth and dento-alveolar development. Since certain genes are involved in craniofacial morphogenesis as well as tissue repair, a primary defect causing cleft lip/palate could lead to altered wound healing. We performed in vitro wound healing assays with primary lip fibroblasts from 16 cleft lip/palate patients. Nine foreskin fibroblast strains were included for comparison. Cells were grown to confluency and scratch wounds were applied; wound closure was monitored morphometrically over time. Wound closure rate showed highly significant differences between fibroblast strains. Statistically, fibroblast strains from the 25 individuals could be divided into three migratory groups, namely "fast", "intermediate", and "slow". Most cleft lip/palate fibroblast strains were distributed between the "fast" (5 strains) and the "intermediate" group (10 strains). These phenotypes were stable over different cell passages from the same individual. Expression of genes involved in cleft lip/palate and wound repair was determined by quantitative PCR. Transforming growth factor-alpha mRNA was significantly up-regulated in the "fast" group. 5 ng/ml transforming growth factor-alpha added to the culture medium increased the wound closure rate of cleft lip/palate strains from the "intermediate" migratory group to the level of the "fast", but had no effect on the latter group. Conversely, antibody to transforming growth factor-alpha or a specific inhibitor of its receptor most effectively reduced the wound closure rate of "fast" cleft lip/palate strains. Thus, fibroblasts from a distinct subgroup of cleft lip/palate patients exhibit an increased migration rate into wounds in vitro, which is linked to higher transforming growth factor-alpha expression and attenuated by interfering with its signaling.
Publication type: Journal Article
Source: MEDLINE
Full text: Available ProQuest at PLoS ONE

4. Title: An alternative clinical approach to achieve greater anterior than posterior maxillary expansion in cleft lip and palate patients.
Citation: Journal of Craniofacial Surgery, November 2014, vol./is. 25/6(e523-6), 1049-2275;1536-3732 (2014 Nov)
Author(s): Oliveira DD, Bartolomeo FU, Cardinal L, Figueiredo DS, Palomo JM, Andrade I Jr
Language: English
Abstract: Cleft lip and palate patients commonly present maxillary constriction, particularly in the anterior region. The aim of this case report was to describe an alternative clinical approach that used a smaller Hyrax screw unconventionally positioned to achieve greater anterior than posterior expansion in patients with complete unilateral cleft lip and palate. The idea presented here is to take advantage of a reduced dimension screw to position it anteriorly. When only anterior expansion was needed (patient 1), the appliance was soldered to the first premolar bands and associated to a transpalatal arch cemented to the first molars. However, when overall expansion was required (patient 2), the screw was positioned anteriorly, but soldered to the first molar bands. Intercanine, premolar, and first molar widths were measured on dental casts with a digital caliper. Pre-expansion and post-expansion radiographs and tomographies were also evaluated. A significant anterior expansion and no intermolar width increase were registered in the first patient. Although patient 2 also presented a greater anterior
than posterior expansion, a noteworthy expansion occurred at the molar region. The alternative approach to expand the maxilla in cleft patients reported here caused greater anterior than posterior expansion when the Mini-Hyrax was associated to a transpalatal arch, and its reduced dimension also minimized discomfort and facilitated hygiene.

**Publication type:** Journal Article  
**Source:** MEDLINE

5. **Title:** An analysis of deformities in revision surgeries for secondary unilateral cleft lip.  
**Citation:** Jcpsp, Journal of the College of Physicians & Surgeons - Pakistan, September 2014, vol./is. 24/9(666-9), 1022-386X, 1681-7168 (2014 Sep)  
**Author(s):** Cheema SA, Asim M  
**Language:** English  
**Abstract:** OBJECTIVE: To analyze the secondary cleft lip deformities and the possible causes in a cohort of cases. PLACE AND DURATION OF STUDY: Services Institute of Medical Sciences and WAPDA Teaching Hospital Complex, Lahore, from September 2008 to March 2012. METHODOLOGY: Consecutive cases of secondary unilateral cleft lip deformities were selected for the study. These cases were interviewed and deformities recorded. Pre and postoperative photographs were taken for comparison. Per operative photographs were taken, after marking of the incisions, to keep a record of the intervention needed to correct the deformities. These cases were then further analyzed to know the deformities and interventions needed for correction of these deformities. RESULTS: Study subjects comprised 114 males and 75 females. Secondary correction was the most common in second decade of life with 82 cases in this group. The most common deformity was unfavorable scar in 150 cases followed by notch at the vermilion border in 124 cases. Short lip was found in 119 cases. Complete revision of the repair was required in 158 cases and 25 cases required partial redo of the initial repair. In other 6 cases, only scar revision was carried out. CONCLUSION: Unfavorable scar followed by vermilion notch and short lip were the most common secondary cleft lip deformities. Better technique helps favorable scar. Vermilion notch and short lip can be overcome by switching from rotation advancement repair to the triangular flap repair of Noordhoff.  
**Publication type:** Journal Article  
**Source:** MEDLINE

6. **Title:** Assessment of pharyngeal airway volume in adolescent patients affected by bilateral cleft lip and palate using cone beam computed tomography.  
**Citation:** Angle Orthodontist, November 2014, vol./is. 84/6(995-1001), 0003-3219; 1945-7103 (2014 Nov)  
**Author(s):** Celikoglu M, Ucar FI, Sekerci AE, Buyuk SK, Ersoz M, Sisman Y  
**Language:** English  
**Abstract:** UNLABELLED: ABSTRACT Objective: To test the null hypothesis that there were no significant differences for pharyngeal airway volumes between the adolescent patients affected by bilateral cleft lip and palate (BCLP) and well-matched controls using cone beam computed tomography. MATERIALS AND METHODS: The study sample consisted of 16 patients (11 female and 5 male; mean [SD] age 14.1 [2.1] years) affected by BCLP and 16 patients (10 female and 6 male; mean [SD] age 13.4 [2.0] years) as age- and sex-matched control group. Craniofacial measurements and pharyngeal airway dimension, area, and volume measurements of patients in both groups were calculated and statistically examined using Student’s t-test and multiple linear regression analyses. RESULTS: Statistically significant differences were found between the BCLP and control groups for SNB (P < .05), SN-GoGn (P < .05), Co-A (P < .05), PAS (P < .01), minAx (P < .01), and oropharyngeal airway volume (P < .05). The most predictive variables for oropharyngeal airway volume were found as PAS (r = .655 and P = .000) and minAx (r = .787 and P = .000). CONCLUSIONS: The null hypothesis was rejected. Oropharyngeal (P < .05) and total (P > .05) airway volumes were found to be less in the BCLP group, and thus the treatment choice in these patients should have positive effects on the pharyngeal airway.  
**Publication type:** Journal Article  
**Source:** MEDLINE

7. **Title:** Can occlusal evaluation of children with unilateral cleft lip and palate help determine future maxillofacial morphology?  
**Citation:** Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(696-706), 1055-6656; 1545-1569 (2014 Nov)  
**Author(s):** Suzuki A, Sasaguri M, Hiura K, Yasunaga A, Mitsuyasu T, Kubota Y, Ninomiya T, Takenoshita Y  
**Language:** English  
**Abstract:** Objective: To investigate the change in occlusal evaluations from the 5-year-olds' index to the Goslon Yardstick and to compare the relationship between the evaluations and maxillofacial growth in patients with complete unilateral cleft lip and palate (UCLP). Design: A prospective longitudinal study. Subjects: The sample
Abstract: Objective: To compare the hyoid bone position between cleft lip/palate and normal patients. Study Design: Cross-sectional analytical study. Place and Duration of Study: Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences (DIEKIOS), Dow University of Health Sciences (DUHS), Karachi, from March 2012 to February 2013. Methodology: The sample for this study consisted of total 68 subjects among which Group 1 consisted of 34 nonsyndromic cleft lip and palate (both unilateral and bilateral) and Group 2 included 34 subjects with normal facial morphology. Both groups included males and females with mean age 14.3 ± 0.1 year. Analysis was done on lateral cephalometric radiographs of patients including angulations taken as Hp-Mp, Hp-OI, Hp-Sn, Cvt-Evt, Opt-Cvt, Nke, Sn-Vert, Cvt-Vert, Sn-Vert and linear distance of hyoid bone measured as C3-H, C3-RGN, and H-RGN. Results: Statistically significant differences [p < 0.001] in C3-H, C3-Rgn, H-Rgn, and Sn-Cvt were found between cleft lip/palate group and normal group. Conclusion: Hyoid bone is located anteriorly and caudally in cleft lip and palate group.

Publication type: Journal: Article
Source: EMBASE

9. Title: Comparison of tooth development stage of the maxillary anterior teeth before and after secondary alveolar bone graft: Unilateral cleft lip and alveolus vs unilateral cleft lip and palate.

Citation: Angle Orthodontist, November 2014, vol./is. 84/6(989-94), 0003-3219;1945-7103 (2014 Nov)
Author(s): Park HM, Han DH, Baek SH
Language: English
Abstract: UNLABELLED: ABSTRACT Objective: To compare the effect of secondary alveolar bone graft (SABG) on the tooth development stage of the maxillary central incisor (MXCI) and maxillary canine (MXC) in terms of the severity of unilateral cleft. MATERIALS AND METHODS: The subjects consisted of 50 boys with unilateral cleft lip and alveolus (UCLA) or unilateral cleft lip, alveolus, and palate (UCLP). The age- and sex-matched subjects were divided into group 1 (UCLA, n = 25; 9.3 ± 0.8 years old) and group 2 (UCLP, n = 25; 9.4 ± 0.6 years old). In panoramic radiographs taken 1 month before (T0) and 1 year after SABG (T1), tooth development stage was evaluated according to the Nolla developmental (ND) stage. A panoramic radiograph taken 3 years after SABG was used as a reference for the final root length of individual tooth. RESULTS: In groups 1 and 2, the ND stage of the MXCI did not exhibit differences between the cleft and non-cleft sides at T0 and T1, respectively. However, although the ND stage of the MXC of group 2 was delayed on the cleft side compared with the non-cleft side at T0 (P < .05), the MXC on the cleft side developed faster than that on the non-cleft side after SABG (P < .01). In terms of tooth development speed, group 2 showed a higher rate of faster developed MXCs on the cleft side compared with the non-cleft side after SABG than group 1 (36.0% vs 8.0%, P < .05). CONCLUSION: SABG performed at approximately 9 years of age might increase tooth development speed of MXC in patients with UCLP compared with patients with UCLA.

Publication type: Journal Article
Source: MEDLINE
10. Title: Complications of ventilation tube insertion in children with and without cleft palate: a nested case-control comparison.

Citation: JAMA Otolaryngology--Head & Neck Surgery, October 2014, vol./is. 140/10(940-3), 2168-6181;2168-619X (2014 Oct 1)

Author(s): Smillie I, Robertson S, Yule A, Wynne DM, Russell CJ

Language: English

Abstract: IMPORTANCE: Optimizing hearing in patients with cleft lip and/or palate (CLP) by early recognition and management of otitis media with effusion is essential for speech development. Some evidence has suggested higher complication rates from ventilation tube (VT) insertion in patients with CLP and has led to a trend not to treat these patients surgically. However, studies have failed to match comparison groups for age and sex.OBJECTIVE: To compare complication rates from VT insertion in pediatric patients with and without CLP. DESIGN, SETTING, AND PARTICIPANTS: The study used a nested case-control design to evaluate 60 pediatric patients with CLP who underwent VT insertion at a children's hospital. The control group of age- and sex-matched patients was selected from a database of 2943 VT insertions. INTERVENTIONS: All patients were administered general anesthesia and underwent VT insertion by a pediatric otorhinolaryngology (ENT) team. MAIN OUTCOMES AND MEASURES: The primary outcomes were numbers of otorrhea complications. Secondly, rates of attendance at an ENT clinic specifically for complications were evaluated. Finally, numbers of complications other than otorrhea were assessed but not statistically analyzed owing to the varied types and low numbers in each group. RESULTS: The control cohort had 151 documented cases of otorrhea compared with 121 in the CLP group (ratio 1.25:1); the difference between groups was not statistically significant (P=.52). There was no significant difference in mean ENT clinic visits per patient for complications between groups (0.80 in the CLP group, 0.78 for controls) (P=.66). Regarding complications other than otorrhea, the control group reported more than the CLP group (43 vs 25; ratio, 1.7:1). CONCLUSIONS AND RELEVANCE: Complication rates of VT placement among patients with CLP were not higher than those among patients without CLP. Therefore, treatment with VT insertion should be administered to patients with CLP under the same guidelines as for those without CLP. Indeed, there could be an argument for a shift in practice toward more aggressive treatment of patients with CLP, who are already vulnerable to speech and social developmental delay.

Publication type: Journal Article

Source: MEDLINE

11. Title: Congenital platelet disorder and type I von Willebrand disease presenting as prolonged bleeding after cleft lip and palate repair.

Citation: Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(740-2), 1055-6656;1545-1569 (2014 Nov)

Author(s): Pang J, Zelken J, Dorafshar AH, Strouse JJ, Redett R 3rd

Language: English

Abstract: Cleft lip and palate can be associated with coagulopathy. Here, we report the first known case of congenital platelet disorder and von Willebrand disease presenting as prolonged bleeding after cleft lip and palate repair. After identifying the underlying pathology, platelet infusions and aminocaproic acid were given to decrease bleeding from a second surgical procedure. Whole exome sequencing identified a von Willebrand factor gene mutation, an adenine to guanine substitution at the c.475A location. A high index of suspicion should be had for coagulopathy in patients with syndromic cleft lip and palate.

Publication type: Journal Article

Source: MEDLINE

Full text: Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal

12. Title: Correction of the Vestibular Web during Primary Repair of Unilateral Cleft Lip.

Citation: Plastic & Reconstructive Surgery, October 2014, vol./is. 134/4(600e-7e), 0007-1226;1529-4242 (2014 Oct)

Author(s): Patel KB, Mulliken JB

Language: English

Abstract: BACKGROUND: After repair of cleft lip and nasal deformity, a lateral vestibular web is often evident on submental view. The authors describe the five components of this web (i.e., piriform rim, upper lateral cartilage, lower lateral cartilage, vestibular lining, and alar base) and present their technique for primary nasal correction and prevention.METHODS: Labial repair follows the Millard rotation-advancement principle. Nasal correction addresses the vestibular web: (1) centralization of deviated anterocaudal septum; (2) elevation of inferiorly positioned medial crus in the C-flap; (3) endonasal advancement and fixation of displaced alar base; (4) excision of excess vestibular lining; (5) release of tethered lateral crus from the piriform ligament; and (6) anatomical fixation of dislocated lower
lateral cartilage to the contralateral middle crus and ipsilateral upper lateral cartilage. RESULTS: Intraoperative dissection exposes the framework of the vestibular web as the lower (caudal) edge of the displaced lateral crus lying beneath expanded vestibular lining. Sixty-two consecutive patients had primary cleft nasal repair focused on the architectural components of the vestibular web. Nostril stenting was not used; the nostril rim scar was hidden and no patients had nostril stenosis. CONCLUSION: The vestibular web seen after repair of a cleft lip has bony, cartilaginous, and soft-tissue elements and can be prevented during primary correction of the cleft nasal deformity.

Publication type: Journal Article
Source: MEDLINE
Full text: Available Journal of reconstructive microsurgery at Plastic and Reconstructive Surgery

13. Title: Demineralized bone matrix for alveolar cleft management.
Citation: Craniomaxillofacial Trauma & Reconstruction, December 2014, vol./is. 7/4(251-7), 1943-3875;1943-3875 (2014 Dec)
Author(s): Madrid JR, Gomez V, Mendoza B
Language: English
Abstract: The aim of this article is to describe the results of the use of demineralized bone matrix putty in alveolar cleft of patients with cleft lip and palate. We performed a prospective, descriptive case series study, in which we evaluated the results of the management of alveolar clefts with demineralized bone matrix. Surgery was performed in 10 patients aged between 7 and 26 years (mean 13 years), involving a total of 13 clefts in the 10 patients. A preoperative cone beam computed tomography (CBCT) was taken to the patients in whom the width of the cleft was measured from each edge of the cleft reporting values between 5.76 and 16.93mm (average, 11.18 mm). The densities of the clefts were measured with a CBCT, 6 months postoperative to assess bone formation. The results showed a register of gray values of 1,148 to 1,396 (mean, 1,270). The follow-up was conducted for 15 to 33 months (mean, 28.2 months). The results did not show satisfactory bone formation in the cleft of patients with the use of demineralized bone matrix.
Publication type: Journal Article
Source: MEDLINE

14. Title: Diagnosis and management of patients with clefts: a comprehensive and interdisciplinary approach.
Citation: Otolaryngologic Clinics of North America, October 2014, vol./is. 47/5(821-52), 0030-6665;1557-8259 (2014 Oct)
Author(s): Hartzell LD, Kilpatrick LA
Language: English
Abstract: This article reviews the most current practice guidelines in the diagnosis and management of patients born with cleft lip and/or palate. Such patients frequently have multiple medical and social issues that benefit greatly from a team approach. Common challenges include feeding difficulty, nutritional deficiency, speech disorders, hearing problems, ear disease, dental anomalies, and both social and developmental delays, among others. Interdisciplinary evaluation and collaboration throughout a patient's development are essential. Copyright 2014 Elsevier Inc. All rights reserved.
Publication type: Journal Article
Source: MEDLINE

15. Title: Does contribution of extended vomer flap to palatoplasty affects speech results.
Citation: Journal of Craniofacial Surgery, November 2014, vol./is. 25/6(1980-4), 1049-2275;1536-3732 (2014 Nov)
Author(s): Calis M, Ekin O, Kayikci ME, Icen M, Suslu N, Ozgur F
Language: English
Abstract: Development of normal speech is the primary goal of successful palatoplasty. The purpose of this study was to determine the importance of the contribution of vomer flap to palatoplasty procedure for speech function. Eighty-one children who underwent 2 flap palatoplasty procedures for cleft palate repair between 2002 and 2010 were retrospectively reviewed in 3 groups. Group 1 underwent palatoplasty without contribution of vomer flap. Group 2 underwent palatoplasty with standard dissection of vomer flap, whereas group 3 underwent palatoplasty with extended dissection of vomer flap. Speech function of the patients was evaluated using objective assessment tools such as nasopharyngoscopy and nasometer. Eighty-one children who underwent 2 flap palatoplasty were included in this study. The mean age at palatoplasty was 10.17 months, and mean length of follow-up was 72.33 months. For most syllables, patients repaired using extended vomer flap demonstrated lower nasalance scores. Nasopharyngoscopic examination revealed velopharyngeal motility in 24 patients (80%) in group 1 and in 20 (83.3%)
and 23 (85.2%) patients in groups 2 and 3, respectively ($P = 0.930$). In velopharyngeal closure, there were only 5 patients (18.5%) in group 3, whereas there were 6 patients (25.0%) for group 2 and 10 patients (33.3%) for group 1 with no closure ($P = 0.311$). Although most optimum results were observed in the group with extended dissection of the vomer flap, contribution of the extended vomer flap to the repair of the soft palate did not lead to significantly better speech results.

**Publication type**: Journal Article

**Source**: MEDLINE

16. **Title**: Early lexical characteristics of toddlers with cleft lip and palate.

**Citation**: Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(622-31), 1055-6656;1545-1569 (2014 Nov)

**Author(s)**: Hardin-Jones M, Chapman KL

**Language**: English

**Abstract**: Objective: To examine development of early expressive lexicons in toddlers with cleft palate to determine whether they differ from those of nonleft toddlers in terms of size and lexical selectivity. Design: Retrospective. Patients: A total of 37 toddlers with cleft palate and 22 noncleft toddlers. Main Outcome Measures: The groups were compared for size of expressive lexicon reported on the MacArthur Communicative Development Inventory and the percentage of words beginning with obstruents and sonorants produced in a language sample. Differences between groups in the percentage of word initial consonants correct on the language sample were also examined. Results: Although expressive vocabulary was comparable at 13 months of age for both groups, size of the lexicon for the cleft group was significantly smaller than that for the nonleft group at 21 and 27 months of age. Toddlers with cleft palate produced significantly more words beginning with sonorants and fewer words beginning with obstruents in their spontaneous speech samples. They were also less accurate when producing word initial obstruents compared with the nonleft group. Conclusions: Toddlers with cleft palate demonstrate a slower rate of lexical development compared with their nonleft peers. The preference that toddlers with cleft palate demonstrate for words beginning with sonorants could suggest they are selecting words that begin with consonants that are easier for them to produce. An alternative explanation might be that because these children are less accurate in the production of obstruent consonants, listeners may not always identify obstruents when they occur.

**Publication type**: Journal Article

**Source**: MEDLINE

**Full text**: Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal

17. **Title**: Effects of lip repair on maxillofacial morphology in patients with unilateral cleft lip with or without cleft palate.

**Citation**: Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(658-64), 1055-6656;1545-1569 (2014 Nov)

**Author(s)**: Shao Q, Chen Z, Yang Y, Chen Z

**Language**: English

**Abstract**: Objective: To evaluate the effects of lip repair on maxillofacial development of patients with unilateral cleft lip with or without cleft palate. Design: Retrospective. Patients: A total of 75 patients were recruited, including 38 surgical patients with complete unilateral cleft lip and alveolus and 37 patients with complete unilateral cleft lip and palate who had lip but not palate repair. As controls, 38 patients with no cleft were selected. All subjects were divided according to two growth stages: before the pubertal peak (GS1) and after the pubertal peak (GS2). Interventions: Lateral cephalograms of all subjects were obtained. Main Outcome Measures: Cephalograms were analyzed and compared in the study and control groups. Results: The patients with unilateral cleft lip and palate in both GS1 and GS2 demonstrated an almost normal maxillary and mandibular growth with retroclined maxillary incisors. The patients with unilateral cleft lip and palate showed a shorter length of maxilla, a more clockwise-rotated mandible, and retroclined maxillary incisors. Conclusions: There was an almost normal maxillary and mandibular growth but retroclined maxillary incisors in patients with cleft lip with or without cleft palate who had received lip repair only, indicating that lip repair may not have a negative impact on the maxillofacial development and influences only the inclination of the maxillary incisors. The shorter anterior-posterior maxillary length and larger gonial angle in patients with unilateral cleft lip and palate compared with those in patients with unilateral cleft lip and alveolus suggest that these variations in maxillary and mandibular growth may be a consequence of the cleft itself.

**Publication type**: Journal Article

**Source**: MEDLINE

**Full text**: Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal
Citation: Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(677-85), 1055-6656;1545-1569 (2014 Nov)
Author(s): Pedersen GS, Pedersen DA, Mortensen LH, Andersen AM, Christensen K
Language: English
Abstract: Objective: To examine differences in oral cleft (OC) occurrence based on maternal only and parental country of origin in Denmark from 1981 to 2002. Methods: Data on all live births from the Danish Medical Birth Register from 1981 to 2002 were linked with the Danish Facial Cleft Database. Cleft cases were categorized into isolated and nonisolated cleft lip with or without palate (CL/P) and cleft palate only (CP). Birth prevalence was calculated as cases per 1,000 live born children by maternal country of origin, world region, and mixed parental groups. Results: We identified 3094 OC cases among 1,319,426 live births. Danish-born women had an OC birth prevalence of 2.38 with a 95% confidence interval (CI) (2.29-2.47) and foreign-born women a significant lower prevalence of 2.01 (CI, 1.77-2.27). This difference was explained by a lower isolated CL/P birth prevalence among foreign-born women of 0.97 (CI, 0.81-1.16) versus 1.35 (CI, 1.28-1.41). No significant differences were seen for the remaining subtypes. Parents with the same foreign country of origin had a lower overall OC (1.63; CI, 1.35-1.94) and isolated CL/P (0.76; CI, 0.57-0.99) birth prevalence than Danish-born parents. This was not the case for any of the mixed parental groups. Overall and subtype prevalence rates varied according to maternal categories of world region. Conclusion: In this study we found differences in OC occurrence among all live births in the Danish population based on maternal country of origin from 1981 to 2002. Danish-born women had higher OC and isolated CL/P birth prevalence compared with foreign-born women.
Publication type: Journal Article
Source: MEDLINE
Full text: Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal

Citation: Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(665-8), 1055-6656;1545-1569 (2014 Nov)
Author(s): Nagashima H, Sakamoto Y, Ogata H, Miyamoto J, Yazawa M, Kishi K
Language: English
Abstract: The purpose of this study was to evaluate the initial defect and the outcome of bone grafts for unilateral alveolar cleft. To determine the absorption of the bone graft in patients with unilateral cleft, computer-aided engineering (CAE) with multi-detector row computed tomography (MDCT) was used. MDCT scans of 29 patients were taken immediately preoperatively and at 1 month and 6 months postoperatively. The patients underwent bone grafting between 8 and 14 years of age using iliac crest bone grafts. Three-dimensional models were created in each period, and the defect at the alveolar cleft and volume of the bone graft were determined in each patient using CAE. Cleft volume and success of alveolar bone grafting were significantly correlated (P < .01). Alveolar clefts with cleft palate required more bone volume than those without cleft palate (P < .01), but the resorption rate did not significantly differ between alveolar clefts with and without cleft palate (0.48 + 0.14 and 0.49 + 0.18, respectively; P = .93). In conclusion, three-dimensional reconstruction of bone grafts using CAE based on MDCT provides a valuable objective assessment of graft volume.
Publication type: Journal Article
Source: MEDLINE
Full text: Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal

20. Title: Evaluation of transverse maxillary expansion after a segmental posterior subapical maxillary osteotomy in cleft lip and palate patients with severe collapse of the lateral maxillary segments.
Citation: Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(651-7), 1055-6656;1545-1569 (2014 Nov)
Author(s): Carpentier S, van Gastel J, Schoenaers J, Carels C, Vander Poorten V, Coucke W, Verdonck A
Language: English
Abstract: Objective: The purpose of this longitudinal retrospective study was to evaluate transverse maxillary expansion after a Schuchardt or segmental posterior subapical maxillary osteotomy (SPSMO) in patients with cleft lip and palate (CLP). A second aim was to compare these data with data for adult patients without CLP who were receiving a surgical assisted rapid palatal expansion (SARPE). Method: The study group comprised 19 patients with CLP and a severe transversally collapsed maxilla who were treated with SPSMO followed by hyrax expansion at the University Hospitals Leuven. Dental casts of the 19 patients were analyzed before treatment, at maximum
expansion, during orthodontic treatment, at the completion of orthodontic treatment. and 2 years after orthodontic treatment and were measured at the canine, premolar, and molar levels. Adult patients without CLP who were enrolled in a prospective study served as the control group. Results: Maxillary expansion within the study group was significantly greater (P < .05) at all measured levels compared with the maxillary arch before treatment. No significant relapse was measured in the study group 2 years after orthodontic treatment. When comparing the study and control groups, the only statistical difference was that canine expansion was significantly greater in the study group. Conclusion: SPSMO followed by maxillary expansion and orthodontic treatment is an appropriate treatment option to correct a severe transversally collapsed maxilla in patients with CLP. The overall treatment effect of SPSMO expansion is comparable with the effects of SARPE, although canine expansion was greater in the SPSMO group.

Publication type: Journal Article
Source: MEDLINE
Full text: Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal

21. Title: Evaluation of two palate repair techniques for the surgical management of velopharyngeal insufficiency.
Citation: Plastic & Reconstructive Surgery, October 2014, vol./is. 134/4(588e-96e), 0007-1226;1529-4242 (2014 Oct)
Author(s): Woo AS, Skolnick GB, Sachanandani NS, Grames LM
Language: English
Abstract: BACKGROUND: The Furlow palatoplasty is commonly used for the correction of velopharyngeal insufficiency in cleft patients. An alternative procedure is introduced involving a single Z-plasty with overlapping intravelar veloplasty (Woo palatoplasty). This study compared the results of both techniques in the correction of velopharyngeal insufficiency.METHODS: After institutional review board approval, a retrospective chart review was performed of all patients who had undergone secondary palatoplasty for the correction of velopharyngeal insufficiency. All nonsyndromic patients with imaging data were evaluated. Data elements included preoperative and postoperative velopharyngeal gap size and perceptual speech examination results.RESULTS: Fifty-two subjects were included: 30 subjects had undergone Furlow palatoplasty and 22 underwent Woo palatoplasty. Overall, a larger proportion of Woo (95 percent) than Furlow subjects (63 percent) did not require secondary surgery (p = 0.005). However, mean presurgery closure was significantly different between groups (p = 0.042). For a more refined assessment, only those with 80 percent or greater preoperative closure were evaluated. Successful results were achieved in 67 percent (10 of 15) in Furlow and in 100 percent (19 of 19) in Woo. Again, this finding was significant (p = 0.005). Linear regression analysis suggested a significant effect of cleft type (beta = 2.3, p = 0.013) on closure after repair, with decreased closure in cases with isolated cleft palate.CONCLUSIONS: The Woo palatoplasty compared favorably with Furlow palatoplasty for correction of velopharyngeal insufficiency. The technique appears to be a viable alternative for palatal re-repair, especially in circumstances when Furlow palatoplasty cannot be performed.CLINICAL QUESTION/LEVEL OF EVIDENCE: Therapeutic, III.
Publication type: Journal Article
Source: MEDLINE
Full text: Available Journal of reconstructive microsurgery at Plastic and Reconstructive Surgery

22. Title: Facial growth evaluation of complete unilateral cleft lip and palate operated patients: a cleft reference center in Paraiba, Brazil, using the “GOSLON” yardstick.
Citation: Oral & Maxillofacial Surgery, December 2014, vol./is. 18/4(403-7), 1865-1550;1865-1569 (2014 Dec)
Author(s): Lacerda RH, Ozawa TO, Ramos TB, Furtado PG, de Oliveira LA, de Oliveira AF
Language: English
Abstract: OBJECTIVES: To evaluate the surgical outcomes of patients with complete unilateral cleft lip and palate (CUCLP) operated on by a single surgeon at the cleft reference center of the Lauro Wanderley University Hospital at the Federal University of Paraiba.METHODS: Forty-four individuals’ dental casts diagnosed with CUCLP, born between 1995 and 2002, mean age of 11 years, were evaluated by three calibrated orthodontic specialists and scored by the Great Ormond Street, London and Oslo (GOSLON) yardstick on two occasions. The scores were compared with those observed in other centers around the world. The Kappa test was applied to evaluate the intra- and inter-examiner agreement. Descriptive statistics was applied for the GOSLON yardsticks core.RESULTS: The mean GOSLON score was 2.75. For the GOSLON yardstick, 43.2 % of the sample presented scores 1 and 2, 31.8 % had score 3, and 25 % were with scores 4 and 5. There was very good intra- and inter-examiner Kappa agreement in the application of the GOSLON yardstick.CONCLUSIONS: The data suggest favorable outcomes, with 75 % of cases with no need of orthognathic surgery. The Kappa values confirmed the high reproducibility of the GOSLON yardstick.
Publication type: Journal Article
23. Title: Fistula incidence after primary cleft palate repair: a systematic review of the literature.  
Citation: Plastic & Reconstructive Surgery, October 2014, vol./is. 134/4(618e-27e), 0007-1226;1529-4242 (2014 Oct)  
Author(s): Hardwicke JT, Landini G, Richard BM  
Language: English  
Abstract: BACKGROUND: The development of an oronasal fistula after primary cleft palate repair has a wide variation reported in the literature. The aim of this review is to identify the reported oronasal fistula incidence to provide a benchmark for surgical practice. METHODS: A systematic review was undertaken to investigate the incidence of fistula. Multiple meta-analyses were performed to pool proportions of reported fistulae, in each data set corresponding to the continent of origin of the study, type of cleft, and techniques of cleft palate repair used. RESULTS: A total of 9294 patients were included from 44 studies. The overall incidence of reported fistula was 8.6 percent (95 percent CI, 6.4 to 11.1 percent). There was no significant difference in the fistula incidence corresponding to the continent of origin of each study or the repair technique used. The incidence of fistula in cleft lip-cleft palate was 17.9 percent, which was significantly higher (p = 0.03) than in cases of cleft palate alone (5.4 percent). CONCLUSIONS: Palatal fistulae were more likely to occur in cases of combined cleft lip-cleft palate, compared with cleft palate alone. The authors would recommend the prospective examination and recording of all fistulae to a standardized classification scheme. CLINICAL QUESTION/LEVEL OF EVIDENCE: Therapeutic, III.  
Publication type: Journal Article  
Source: MEDLINE  
Full text: Available Journal of reconstructive microsurgery at Plastic and Reconstructive Surgery  
Full text: Available Journal of reconstructive microsurgery at Plastic and Reconstructive Surgery

24. Title: Fracture of the vomero-premaxillary junction in a repaired bilateral cleft lip and palate patient.  
Citation: Craniomaxillofacial Trauma & Reconstruction, December 2014, vol./is. 7/4(302-5), 1943-3875;1943-3875 (2014 Dec)  
Author(s): Zwahlen RA, Jayaratne YS, Htun SY, Butow KW  
Language: English  
Abstract: Although dental trauma is common in bilateral cleft lip and palate (BCLP), patients' reports on bony fractures of the vomero-premaxillary junction cannot be found. The aim of this report is to illustrate clinical findings and the technique of fracture fixation in a child suffering from a fractured vomero-premaxillary junction as well as subsequent columella lengthening. A 4-year-old girl with a repaired BCLP presented with an open mucosal laceration and fractured vomero-premaxillary junction. Open reduction and fixation of the dislocated premaxilla was performed under general anesthesia. Fractured bone pieces of the vomero-premaxillary junction were removed and sharp bone edges at the vomer and the premaxilla were grinded. The repositioned premaxilla was fixed to the lateral alveolar arches with two mucoperiosteal sutures on each side. Additional columella lengthening was performed 2 years later. All family members were very happy about the new aesthetics of the girl. Although rare, fractures of the vomero-premaxillary junction present several challenges to clinicians related to anatomical, physiological, and psychological issues. Immediate and minimal invasive treatment strategies are recommended when managing such cases.  
Publication type: Journal Article  
Source: MEDLINE

25. Title: Functional Analysis of SPECC1L in Craniofacial Development and Oblique Facial Cleft Pathogenesis.  
Citation: Plastic & Reconstructive Surgery, October 2014, vol./is. 134/4(748-59), 0007-1226;1529-4242 (2014 Oct)  
Author(s): Gfrerer L, Shubinets V, Hoyos T, Kong Y, Nguyen C, Pietschmann P, Morton CC, Maas RL, Liao EC  
Language: English  
Abstract: BACKGROUND: Oblique facial clefts, also known as Tessier clefts, are severe orofacial clefts, the genetic basis of which is poorly understood. Human genetics studies revealed that disruption in SPECC1L resulted in oblique facial clefts, demonstrating that oblique facial cleft malformation has a genetic basis. An important step toward innovation in treatment of oblique facial clefts would be improved understanding of its genetic pathogenesis. The authors exploit the zebrafish model to elucidate the function of SPECC1L by studying its homolog, specc1lb. METHODS: Gene and protein expression analysis was carried out by reverse-transcriptase polymerase chain reaction and immunohistochemistry staining. Morpholino knockdown, mRNA rescue, lineage tracing and terminal deoxynucleotidyl transferase-mediated dUTP nick end-labeling assays were performed for functional analysis. RESULTS: Expression of specc1lb was detected in epithelia juxtaposed to chondrocytes. Knockdown of specc1lb resulted in bilateral clefts between median and lateral elements of the ethmoid plate, structures analogous...
to the frontonasal process and the paired maxillary processes. Lineage tracing analysis revealed that cranial neural crest cells contributing to the frontonasal prominence failed to integrate with the maxillary prominence populations. Cells contributing to lower jaw structures were able to migrate to their destined pharyngeal segment but failed to converge to form mandibular elements. CONCLUSIONS: These results demonstrate that specc1lb is required for integration of frontonasal and maxillary elements and convergence of mandibular prominences. The authors confirm the role of SPECC1L in orofacial cleft pathogenesis in the first animal model of Tessier cleft, providing morphogenetic insight into the mechanisms of normal craniofacial development and oblique facial cleft pathogenesis.

**Publication type:** Journal Article  
**Source:** MEDLINE  
**Full text:** Available *Journal of reconstructive microsurgery* at Plastic and Reconstructive Surgery

26. **Title:** Huge nasopharyngeal teratoma with a cleft palate and bifid tongue in a patient with pierre robin syndrome.  
**Citation:** Journal of Craniofacial Surgery, November 2014, vol./is. 25/6(e588-90), 1049-2275;1536-3732 (2014 Nov)  
**Author(s):** Han HH, Kim JH, Seo BF, Moon SH, Oh DY, Rhie JW  
**Language:** English  
**Abstract:** PURPOSE: Nasopharyngeal teratoma is a very rare neoplasm that develops on the oronasal cavity as an expanding and cavity-filling lesion. We present a rare case of nasopharyngeal teratoma associated with a cleft palate and bifid tongue in a patient with Pierre Robin syndrome. METHODS: A preterm male neonate of 33 weeks and 6 days was referred to our department. A protruding solid mass with approximately 7.0 x 4.0-cm size arising from the vomer and combined cleft palate and tongue covered with pinkish skin with lanugo were observed. In addition, there was a bandlike tissue connecting vomer and sublingual area, which divided and restricted the anterior portion of the tongue. RESULTS: An early surgical intervention was decided because of problems with airways and nutrition caused by the mass. The mass was completely removed from the vomer. The histologic examination of the mass was consistent with mature teratoma. After his first operation, he was finally diagnosed with the Pierre Robin syndrome. After 4 months, a tongue reduction was conducted for macroglossia, and after 9 months, remnant teratoma excision and a palate repair were conducted using 2-flap palatoplasty. CONCLUSIONS: A nasopharyngeal teratoma is a rare case and induces a cleft palate and bifid tongue in a preterm infant, leading to severe airway and nutritional problems. A teratoma interferes with the fusion of embryonic tissues in the early developmental period, in particular, with the palatal fusion severely prevented if the teratoma is accompanied by a Pierre Robin syndrome such as in this case.

**Publication type:** Journal Article  
**Source:** MEDLINE

27. **Title:** Impact of Early Synchronous Lip and Palatal Repair on Speech.  
**Citation:** Folia Phoniatica et Logopaedica, 01 October 2014, vol./is. 65/6(303-311), 10217762  
**Author(s):** Luyten, Anke, Bettens, Kim, D’haeseleer, Evelien, De Ley, Sophia, Hodges, Andrew, Galiwango, George, Vermeersch, Hubert, Van Lierde, Kristiane  
**Language:** English  
**Abstract:** Aims: The purpose of this study was to describe articulation and resonance characteristics of Ugandan English-speaking children with cleft lip and palate (CLP) after synchronous lip and palatal closure (Sommerlad technique) prior to the age of 6 months in comparison with an age- and gender-matched control group. Methods: Eleven Ugandan patients with CLP (mean age 4;9 years), repaired during a synchronous lip and (soft and hard) palatal closure at a mean age of 3.4 months, were included as well as a control group (n = 22) consisting of 2 Ugandan age- and gender-matched noncleft children for each patient (mean age 4;10 years). Objective and perceptual speech assessment techniques were applied. Results: Consonant inventories were significantly smaller in the CLP group. Moreover, phonetic disorders and phonological processes occurred in 91 and 100% of the CLP group, respectively. Perceptual consensus evaluation revealed absence of hyponasality and cul-de-sac resonance in all patients. Hypernasality and nasal emission/turbulence occurred in 18 and 27% of the patients, respectively. No significant group differences were observed regarding the mean nasalance values of oral speech samples. Conclusion: Various deviations from normal speech development seem to occur in patients with CLP following synchronous lip and palatal closure before 6 months of age. © 2014 S. Karger AG, Basel

**Publication type:** journal article  
**Source:** CINAHL

28. **Title:** Initial treatment and early weight gain of children with Robin Sequence in Germany: a prospective
epidemiological study.

**Citation:** Archives of Disease in Childhood -- Fetal & Neonatal Edition, 01 November 2014, vol./is. 99/6(0-), 13592998

**Author(s):** Maas, Christoph, Poets, Christian F

**Language:** English

**Abstract:** BACKGROUND: To investigate birth prevalence of Robin Sequence (RS), distribution of implemented treatments and factors influencing weight gain during initial hospitalisation. METHODS: Prospective population-based survey (August 2011-July 2013) on new hospital admissions of infants with RS in Germany. RS was defined as retrognathia/micrognathia and at least one of the following: upper airway obstruction, snoring or hypoxaemia; glossoptosis; feeding difficulties; failure to thrive; cleft palate or RS-associated syndrome. Birth prevalence was calculated using data from the National Bureau of Statistics and in-hospital weight gain evaluated by calculating differences in SD scores (SDS) for weight. Comparisons between cohorts were performed using the Wilcoxon/Kruskal-Wallis test or Fisher’s exact test. RESULTS: 151 patients with RS could be verified resulting in a birth prevalence of 11.3 per 100000 live births. Orthodontic therapy (feeding plate or pre-epiglottic baton plate, PEBP) was applied most frequently (107 infants), followed by prone positioning (97 infants). Tracheotomy was rarely performed (n=7). For 115 infants, implementation of more than one intervention was reported. Infants with serious respiratory difficulties during initial hospitalisation (n=58) showed a more pronounced decrease in SDS for weight (median (IQR) -0.81 (-1.32 to -0.26) vs -0.48 (-0.86 to 0.02); p=0.008) whereas treatment with PEBP was associated with better weight gain (SDS-difference for weight -0.37 (-1.06 to 0.02) vs -0.74 (-1.09 to -0.35); p=0.022). CONCLUSIONS: Non-surgical management is preferred for infants with RS in Germany. The extent of upper airway obstruction seemed to influence in-hospital weight gain, while use of the PEBP was associated with improved early weight gain.

**Publication type:** journal article

**Source:** CINAHL

**Full text:** Available Highwire Press at Salisbury District Hospital Healthcare Library

**Full text:** Available Highwire Press at Fetal and Neonatal

---

**29. Title:** International confederation for cleft lip and palate and related craniofacial anomalies task force report: beyond eurocleft.

**Citation:** Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(e146-55), 1055-6656;1545-1569 (2014 Nov)

**Author(s):** Semb G

**Language:** English

**Abstract:** The assigned objective for the Task Force Beyond Eurocleft was "to make recommendations for initiations of local and/or participation in multi-national cleft outcome studies and consist of individuals from the European experience with cleft outcome studies (Scandcleft, Eurocleft) and those who have initiated, or intend to initiate, similar studies in other geographical areas." By May 2013 the Task Force (TF) consisted of 183 members from 59 countries. It was agreed that this initiative should be truly global and include all cleft specialties as well as representatives from cleft support groups in recognition of the huge commitment for improving cleft care worldwide. The vision for this group is to build a dynamic, well-functioning TF that will work globally and be multidisciplinary with inclusive and respectful behavior to improve care for all individuals born with cleft lip and/or palate. As there is a large diversity in needs and interest in the group a range of parallel approaches would be required depending on the experience, resources, and challenges of regions, teams, and individuals. Important ideas for future work were: (1) Work on a global survey of access, existing outcome studies, current collaborations, and lessons learned. (2) Work towards the creation of a lasting, living resource for newcomers to intercenter collaboration that is kept fresh with new reports, copies of relevant publications, model grant applications, and a list of volunteers with the right experience to provide support and guidance for new initiatives. (3) Develop simple online training modules to provide information about the benefits and principles of multidisciplinary care, collaborative data collection and auditing short and longer-term outcomes. (4) Establish subgroups that will work within all regions of the world with regional and national leaders identified. An evaluation of current standards of care should be undertaken and country/region specific remedies to optimize treatment outcome suggested. (5) Reach agreement on minimum standards of care, minimum record collection, and reach consensus on simple outcome measures in all disciplines. This should include all cleft types and all ages. These standards could be used to encourage governments to fund multidisciplinary care. (6) Teams will be encouraged to start and continue recordkeeping using simple and agreed protocols, according to agreed standards of minimum records and later share their data with other teams and then, embark on outcome studies. (7) Teams already active in research should: Create a register for cleft professionals and teams to reach agreement of contemporary and comprehensive multidisciplinary outcome measures, explore the possibilities using modern technology and plan large multi-national studies. A patient/parent centered data collection should always be included. These studies need funding. One task
could also be exploring whether health care at a distance could be initiated using new technology.

**Publication type:** Journal Article

**Source:** MEDLINE

**Full text:** Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal

---

30. **Title:** International confederation for cleft lip and palate and related craniofacial anomalies task force report: holistic outcomes.

**Citation:** Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(e130-4), 1055-6656;1545-1569 (2014 Nov)

**Author(s):** Broder HL, Submitted on behalf of the Holistic Outcomes Task Force by

**Language:** English

**Abstract:** Objective: This paper describes the process and outcomes of the 2013 American Cleft Palate-Craniofacial Association task force on Holistic Outcomes. The goals and membership of the task force are presented. Methods: Using internet communication, the group introduced themselves, shared ideas and information related to holistic assessment and implementation of using a validated holistic measure, the Child Oral Health Impact Profile (COHIP) at participating international sites. Results: Data from the sites were analyzed using descriptive statistics. Administration of the COHIP was successful. It varied from self-completion as well as verbal presentation due to language differences and a function of the short time period to complete collection. Additionally qualitative comments were reported by the task force site directors. Conclusions: Future directions for holistic assessment and communication among task force members and sites were discussed at the Congress and are presented in this report.

**Publication type:** Journal Article

**Source:** MEDLINE

**Full text:** Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal

---

31. **Title:** International confederation for cleft lip and palate and related craniofacial anomalies task force report: palatoplasty in the speaking individual with unrepaired cleft palate.

**Citation:** Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(e122-8), 1055-6656;1545-1569 (2014 Nov)

**Author(s):** Sommerlad BC

**Language:** English

**Abstract:** Introduction: The benefits or otherwise of late palate repair in older children or adults are uncertain. The outcomes, particularly without appropriate speech therapy, are often disappointing. The issue is of special importance in the poorer countries where these patients are most commonly seen and where limited capacity and facilities may have to be rationed. Method: A task force was set up to report back to the International Congress in Orlando in May 2013. The chairman and some members were nominated by the organizers and further members were added during the discussion process. Some of the members had considerable experience of late palate repair. The task force compiled a report after 9 months of e-mail correspondence. The report includes reports of some previously unpublished studies. A summary of the report was presented at Cleft 2013 in Orlando. Conclusions: There was a general consensus that late palate repair is of benefit for many patients and that, even if normal speech is not attained, outcomes are positive. Outcomes depend on the age of the patient (the younger the better), on the skill of the surgeon and, ideally, on the availability of appropriate speech therapy. A protocol for a prospective international multi-center study is proposed.

**Publication type:** Journal Article

**Source:** MEDLINE

**Full text:** Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal

---

32. **Title:** International confederation for cleft lip and palate and related craniofacial anomalies task force report: speech assessment.

**Citation:** Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(e138-45), 1055-6656;1545-1569 (2014 Nov)

**Author(s):** Fitzsimons DA

**Language:** English

**Abstract:** This paper describes the outcome of the "Speech Assessment" Task Force of the 12th International Congress of the Confederation for Cleft Lip and Palate and Related Craniofacial Anomalies, held in 2013. This task force attempted to identify a draft set of professional competencies required by speech professionals for the perceptual evaluation of cleft palate speech. The task force also generated a series of general and competency-
specific questions that could be useful in subsequent evaluation and study of these competencies, particularly in regards to the application of these competencies to cross linguistic speech assessment. Further review and revision of these competencies is recommended.

**Publication type:** Journal Article

**Source:** MEDLINE

**Full text:** Available *The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association* at Cleft Palate-Craniofacial Journal

---

**33.Title:** Joint testing of genotypic and gene-environment interaction identified novel association for BMP4 with non-syndromic CL/P in an asian population using data from an International Cleft Consortium

**Citation:** PLoS ONE, October 2014, vol./is. 9/10, 1932-6203 (10 Oct 2014)


**Language:** English

**Abstract:** Background: Non-syndromic cleft lip with or without cleft palate (NSCL/P) is a common disorder with complex etiology. The Bone Morphogenetic Protein 4 gene (BMP4) has been considered a prime candidate gene with evidence accumulated from animal experimental studies, human linkage studies, as well as candidate gene association studies. The aim of the current study is to test for linkage and association between BMP4 and NSCL/P that could be missed in genome-wide association studies (GWAS) when genotypic (G) main effects alone were considered. Methodology/Principal Findings: We performed the analysis considering G and interactions with multiple maternal environmental exposures using additive conditional logistic regression models in 895 Asian and 681 European complete NSCL/P trios. Single nucleotide polymorphisms (SNPs) that passed the quality control criteria among 122 genotyped and 25 imputed single nucleotide variants in and around the gene were used in analysis. Selected maternal environmental exposures during 3 months prior to and through the first trimester of pregnancy included any personal tobacco smoking, any environmental tobacco smoke in home, work place or any nearby places, any alcohol consumption and any use of multivitamin supplements. A novel significant association held for rs7156227 among Asian NSCL/P and non-syndromic cleft lip and palate (NSCLP) trios after Bonferroni correction which was not seen when G main effects alone were considered in either allelic or genotypic transmission disequilibrium tests. Odds ratios for carrying one copy of the minor allele without maternal exposure to any of the four environmental exposures were 0.58 (95%CI = 0.44, 0.75) and 0.54 (95%CI = 0.40, 0.73) for Asian NSCL/P and NSCLP trios, respectively. The Bonferroni P values corrected for the total number of 117 tested SNPs were 0.0051 (asymptotic P = 4.39*10^-5) and 0.0065 (asymptotic P = 5.54*10^-5), accordingly. In European trios, no significant association was seen for any SNPs after Bonferroni corrections for the total number of 120 tested SNPs. Conclusions/Significance: Our findings add evidence from GWAS to support the role of BMP4 in susceptibility to NSCL/P originally identified in linkage and candidate gene association studies.

**Publication type:** Journal: Article

**Source:** EMBASE

**Full text:** Available ProQuest at PLoS ONE

**Full text:** Available ProQuest at PLoS One

---

**34.Title:** Lateral cleft lip and macrostomia: Case report and review of the literature.

**Citation:** Journal of Indian Association of Pediatric Surgeons, October 2014, vol./is. 19/4(242-3), 0971-9261;0971-9261 (2014 Oct)

**Author(s):** Joshi M, Khandelwal S, Doshi B, Samvatsarkar S

**Language:** English

**Abstract:** Lateral clefts are rare in occurrence. The lateral cleft is cause by failure of fusion of the maxillary and mandibular dermatomes. It is also associated with preaurical tags. We present a case of a lateral cleft of the lip with multiple bilateral preauricular tags that was repaired using triangular flaps.

**Publication type:** Journal Article

**Source:** MEDLINE

**Full text:** Available *Journal of Indian Association of Pediatric Surgeons* at Journal of Indian Association of Pediatric Surgeons

**Full text:** Available *Journal of Indian Association of Pediatric Surgeons* at Journal of Indian Association of Pediatric Surgeons

---

**35.Title:** Le fort I maxillary advancement using distraction osteogenesis.

**Citation:** Seminars in Plastic Surgery, November 2014, vol./is. 28/4(193-8), 1535-2188;1535-2188 (2014 Nov)
Treatment of maxillary hypoplasia has traditionally involved conventional Le Fort I osteotomies and advancement. Advancements of greater than 10mm risk significant relapse. This risk is greater in the cleft lip and palate population, whose anatomy and soft tissue scarring from prior procedures contributes to instability of conventional maxillary advancement. Le Fort I advancement with distraction osteogenesis has emerged as viable, stable treatment modality correction of severe maxillary hypoplasia in cleft, syndromic, and noncleft patients. In this article, the authors provide a review of current data and recommendations concerning Le Fort I advancement with distraction osteogenesis. In addition, they outline their technique for treating severe maxillary hypoplasia with distraction osteogenesis using internal devices.

Publication type: Journal Article
Source: MEDLINE

36. Title: Morphometric Analysis of Brain Shape in Children With Nonsyndromic Cleft Lip and/or Palate.
Citation: Journal of Child Neurology, December 2014, vol./is. 29/12(1616-25), 0883-0738;1708-8283 (2014 Dec)
Author(s): Chollet MB, DeLeon VB, Conrad AL, Nopoulos P
Language: English
Abstract: The purpose of this study was to test for differences in brain shape among children with cleft palate only (n = 22), children with cleft lip and palate (n = 35), and controls (n = 39) using Euclidean distance matrix analysis. Sixteen percent of interlandmark distances differed between children with cleft palate only and controls, 10% differed between children with cleft lip and palate and controls, and 10% differed between children with cleft palate only and children with cleft lip and palate. Major differences in brain shape associated with cleft lip and/or palate included posterior expansion of the occipital lobe, reorientation of the cerebellum, heightened callosal midbody, and posterior displacement of the caudate nucleus and thalamus. Differences in brain shape unique to cleft palate only and to cleft lip and/or palate were also identified. These results expand upon previous volumetric studies on brain morphology in individuals with cleft lip and/or palate and provide additional evidence that the primary defect in cleft lip and/or palate results in both facial and brain dysmorphology. The Author(s) 2013.
Publication type: Journal Article
Source: MEDLINE

37. Title: Orthodontic considerations for maxillary distraction osteogenesis in growing patients with cleft lip and palate using internal distractors.
Citation: Seminars in Plastic Surgery, November 2014, vol./is. 28/4(207-12), 1535-2188;1535-2188 (2014 Nov)
Author(s): Silveira Ad, Moura PM, Harshbarger RJ 3rd
Language: English
Abstract: The orthodontist plays a key role in the selection of the optimal treatment for patients followed by a craniofacial team. For patients with cleft lip and palate, the need for multidisciplinary treatment planning and sequentially staged treatment is essential for successful patient outcomes. The technique of Le Fort I distraction osteogenesis of the maxilla using an internal device is potentially a predictable, stable, and convenient option for the correction of severe maxillary hypoplasia. It is an alternative option for treatment of maxillary hypoplasia in growing patients. In this article, the authors describe the orthodontist's approach to the management of cleft patients with severe maxillary deficiency with the use of an internal distraction device. The information is presented with a focus on the clinical aspects of treatment, using case illustrations and appropriate literature.
Publication type: Journal Article
Source: MEDLINE

38. Title: Role of angiogenesis-related genes in cleft lip/palate: Review of the literature
Citation: International Journal of Pediatric Otorhinolaryngology, October 2014, vol./is. 78/10(1579-1585), 0165-5876;1872-8464 (01 Oct 2014)
Author(s): Francois-Fiquet C., Poli-Merol M.L., Nguyen P., Landais E., Gaillard D., Doco-Fenzy M.
Language: English
Abstract: Objectives: Cleft lip and cleft palate (CLP) are the most common congenital craniofacial anomalies. They have a multifactorial etiology and result from an incomplete fusion of the facial buds. Two main mechanisms, acting alone or interacting with each other, were evidenced in this fusion defect responsible for CLP: defective tissue development and/or defective apoptosis in normal or defective tissues. The objective of this work was to study the implication and role of angiogenesis-related genes in the etiology of CL/P. Methods: Our methodological approach included a systematic and thorough analysis of the genes involved in CL/P (syndromic and non-syndromic forms)
including previously identified genes but also genes that could potentially be angiogenesis-related (OMIM, PubMed). We studied the interactions of these different genes and their relationships with potential environmental factors. Results: TGFbeta, FGA, PDGFc, PDGFRa, FGF, FGFR1, FGFR2 growth factors as well as MMP and TIMP2 proteolytic enzymes are involved in the genesis of CLP (P>L). Furthermore, 18 genes involved in CLP also interact with angiogenesis-related genes. Discussion: Even if the main angiogenesis-related genes involved in CLP formation are genes participating in several biological activities and their implication might not be always related to angiogenesis defects, they nevertheless remain an undeniably important research pathway. Furthermore, their interactions with environmental factors make them good candidates in the field of CLP prevention.

**Publication type:** Journal: Review

**Source:** EMBASE

39. **Title:** Spatial and temporal clustering of isolated cleft lip with or without cleft palate in Poland.

**Citation:** International Journal of Environmental Health Research, 01 November 2014, vol./is. 24/6(567-579), 09603123

**Author(s):** Materna-Kiryłuk, Anna, Wićckowska, Barbara, Wiśniewska, Katarzyna, Czyżewska, Małgorzata, Godula-Stuglik, Urszula, Jaworska-Bobkier, Romana, Walenczka, Zofia, Kucharska, Zofia, Latos-Bieleńska, Anna

**Language:** English

**Abstract:** Background: Geographic variation in the prevalence of isolated cleft lip with or without cleft palate may be due to exogenous environmental factors or genetic variation. In this study, we aim to evaluate the prevalence of isolated cleft lip with or without cleft palate in Polish urban and rural environments in order to identify geographic areas with high prevalence (defect clusters). Methods: We use all cases of congenital malformations reported to the Polish Registry of Congenital Malformations in the years 1998–2008 from the total population of 2,362,502 births. Results: We detect a strong signal of increased prevalence of isolated cleft lip with or without cleft palate in a single region of Poland, the Dolnośląskie voivodeship. Furthermore, we demonstrate a statistically significant prevalence differences between the urban and rural areas within this region. Through our comprehensive spatiotemporal analysis, we precisely define the cluster of the highest risk that comprises the eastern part of this voivodeship.

**Publication type:** journal article

**Source:** CINAHL

40. **Title:** Speech outcome in complete unilateral cleft lip and palate - a comparison of three methods of the hard palate closure.

**Citation:** Journal of Oral Rehabilitation, November 2014, vol./is. 41/11(809-15), 0305-182X;1365-2842 (2014 Nov)

**Author(s):** Hortis-Dzierzbicka M, Radkowska E, Stecko E, Dudzinski L, Fudalej PS

**Language:** English

**Abstract:** The aim of this study was to compare the speech in subjects with cleft lip and palate, in whom three methods of the hard palate closure were used. One hundred and thirty-seven children (96 boys, 41 girls; mean age = 12 years, SD = 12) with complete unilateral cleft lip and palate (CUCLP) operated by a single surgeon with a one-stage method were evaluated. The management of the cleft lip and soft palate was comparable in all subjects; for hard palate repair, three different methods were used: bilateral von Langenbeck closure (b-vL group, n = 39), unilateral von Langenbeck closure (u-vL group, n = 56) and vomerplasty (v-p group, n = 42). Speech was assessed: (i) perceptually for the presence of a) hypernasality, b) compensatory articulations (CAs), c) audible nasal air emissions (ANE) and d) speech intelligibility; (ii) for the presence of compensatory facial grimacing, (iii) with clinical intra-oral evaluation and (iv) with videonasendoscopy. A total rate of hypernasality requiring pharyngoplasty was 51%; total incidence post-oral compensatory articulations (CAS) was 22%. The overall speech intelligibility was good in 847% of cases. Oronasal fistulas (ONFs) occurred in 157% b-vL subjects, 71% u-vL subjects and 50% v-p subjects (P < 0001). No statistically significant intergroup differences for hypernasality, CAs and intelligibility were found (P > 01). In conclusion, the speech after early one-stage repair of CUCLP was satisfactory. The method of hard palate repair affected the incidence of ONFs, which, however, caused relatively mild and inconsistent speech errors. 2014 John Wiley & Sons Ltd.

**Publication type:** Journal Article

**Source:** MEDLINE

41. **Title:** Speech therapy where there are no speech therapists: the task force for the american cleft palate-craniofacial association.

**Citation:** Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(e135-7), 1055-6656;1545-1569 (2014 Nov)

**Author(s):** Scherer NJ, "Speech Therapy Where There Are No Speech Therapists" Task Force
Objective: Submucous cleft palate (SMCP) is a congenital condition associated with abnormal development of the soft palate musculature. In a proportion of cases, this results in velopharyngeal insufficiency (VPI), the treatment for which includes pharyngeal flap surgery, pharyngoplasty, and palate reconstruction. The aim of this paper is to determine whether there is superiority of one or more types of surgical procedure over the others in improving speech in patients with VPI secondary to SMCP. Methodology: Nine databases, including MEDLINE and EMBASE, were searched between inception and January 2013 to identify articles published relating to the surgical management of SMCP. Only studies that reported outcome measures for postoperative speech were included in the systematic review. Results: Twenty-six studies analyzing the outcomes of surgery for VPI in patients with SMCP met the inclusion criteria. In these studies, speech outcomes were measured either in a binary fashion (i.e., normal speech or evidence of VPI) or using scales of VPI severity. Of the 26 studies, only two utilized blinded speech assessment, and 12 included both preoperative and postoperative speech assessment. Conclusions: The review found little evidence to support any specific surgical intervention. This is in large part due to the inclusion of mixed etiologies within study populations and the lack of unbiased validated preoperative and postoperative speech assessment. Further methodologically rigorous studies need to be conducted to provide a secure evidence base for the surgical management of SMCP.
44. Title: Surgical impact and speech outcome at 2.5 years after one- or two-stage cleft palate closure
Citation: International Journal of Pediatric Otorhinolaryngology, November 2014, vol./is. 78/11(1903-1907), 0165-5876;1872-8464 (01 Nov 2014)
Author(s): Randag A.C., Dreise M.M., Ruettermann M.
Language: English
Abstract: Objective: In the ongoing discussion about timing of palate closure, it is said that early closure is favorable for speech development, but can interfere with maxillary growth. On the other hand, beneficial results on both after one-stage palate closure have also been presented. The assumption that one-stage palate closure leads to less surgical impact on the child probably contributed to the choice for this procedure in most cleft centers. However, no previous research has verified this assumption. The aim of the present study is to compare surgical impact and speech outcome at 2.5 years of age between children who underwent either one- or early two-stage palate closure. Methods: Patients underwent either one-stage palate closure between 2007 and 2010 at a median age of 10.8 months (group 1, n= 24) or early two-stage closure before 2007 at median ages of 10.4 and 18.2 months, respectively (group 2, n= 24). Surgical impact was compared between the two groups by means of duration of surgery, length of hospital stay and number of post-operative complications. Speech outcome was compared by means of resonance problems, nasal air emission, articulation and intelligibility, all assessed at a median age of 2.5 years. Results: The one-stage closure group showed significantly shorter duration of surgery and length of hospital stay (p< 0.001 and p= 0.001, respectively) and significantly better articulation (p= 0.029) than the early two-stage closure group. Conclusion: One-stage palate closure is preferable over early two-stage palate closure with regard to surgical impact and speech development. More extensive, prospective studies, in which maxillary growth is taken into account, should be conducted.
Publication type: Journal: Article
Source: EMBASE

45. Title: The 70-degree telescope as a teaching tool for cleft palate repair and pharyngoplasty surgery
Citation: International Journal of Pediatric Otorhinolaryngology, November 2014, vol./is. 78/11(1833-1836), 0165-5876;1872-8464 (01 Nov 2014)
Author(s): Jabbour N., Chinnadurai S., Wootten C.T., Cofer S.A., Goudy S.L.
Language: English
Abstract: Objective: To determine the optimum positioning of a 70-degree telescope to provide a maximum view of the palate and posterior pharynx for observers while minimally obstructing the direct view of a surgeon. Design: Simulator testing of clinical protocol. Setting: Simulation center of an academic tertiary care children’s hospital. Interventions: The palate and pharynx of an infant airway mannequin was exposed with a Dingman mouthgag. A 4.5 mm, 70-degree endoscope was secured to the Mayo stand to provide a projected image of the simulated operative procedure. Various positions of the 70-degree telescope were photodocumented by manipulating the angle of the scope, the extension past the lower lip, and the distance of the scope tip away from the midline. Using a 4-point Likert scale, three surgeons rated the randomized photos from both the direct operative view and the projected endoscopic view. Results: Average rating for the adequacy of the view for pharyngeal surgery was 2.4/4.0 and for palate surgery was 3.1/4.0 (p= 001). Only 4 of 22 scope positions were rated as minimally obstructive to direct view by all three surgeons. Only 1 position - scope parallel and just lateral to the tongue blade - was rated as minimally obstructive and adequate for both pharyngeal and palatal surgery by all three surgeons. Conclusions: In training centers, a 70-degree telescope attached to a Mayo stand may be useful for teaching and assessing cleft palate and pharyngoplasty surgery, while providing minimal obstruction to direct view by the surgeon.
Publication type: Journal: Article
Source: EMBASE

46. Title: The effects of lip revision surgery on nasolabial esthetics in patients with cleft lip.
Citation: Orthodontics & Craniofacial Research, November 2014, vol./is. 17/4(216-25), 1601-6335;1601-6343 (2014 Nov)
Author(s): Mercado AM, Phillips C, Vig KW, Trotman CA
Language: English
Abstract: OBJECTIVES: 1) To determine the concordance among surgeons on subjective assessments of nasolabial esthetics in children with repaired cleft lip; and 2) to evaluate longitudinal changes in nasolabial esthetics in relation
to cleft lip revision surgery. SETTING AND SAMPLE POPULATION: School of Dentistry at University of North Carolina, Chapel Hill. Children with repaired unilateral cleft lip: 32 had lip revision surgery and 27 did not have surgery. MATERIALS AND METHODS: Retrospective observational study from a non-randomized clinical trial. Ratings of nasolabial esthetics performed by six surgeons using the Asher-McDade scale at baseline and 12-month follow-up. RESULTS: Concordance among surgeons ranged from poor to acceptable. Nasolabial ratings at follow-up were better in the Revision group than in the Non-Revision group, although differences were small. The most prevalent change in the Revision Group was improvement in one or more units on the scale, while 'no change' was most prevalent in the Non-Revision group. Participants in the Revision group were more likely to receive a 'no' in relation to the need for lip or nose revision at the follow-up visit. CONCLUSION: There were mild esthetic improvements observed in relation to lip revision surgery, which should be interpreted with caution given the subjectivity of the rating method used. 2014 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd.

**Publication type:** Journal Article

**Source:** MEDLINE

47. **Title:** Three-dimensional Cephalometric Analysis of Adolescents With Cleft Lip and Palate Using Computed Tomography-Guided Imaging.

**Citation:** Journal of Craniofacial Surgery, November 2014, vol./is. 25/6(1939-42), 1049-2275;1536-3732 (2014 Nov)

**Author(s):** Zhao ZM, Zhu Y, Huo R, Su JR, Gao F

**Language:** English

**Abstract:** OBJECTIVE: To propose landmarks and a new coordinate system to aid three-dimensional cephalometric analysis of adolescent cleft lip and palate (CLP) using computed tomography (CT) imaging. METHODS: Sixty-four-row CT images obtained from 52 adolescent patients were retrospectively analyzed with the MIMICS program (MIMICS 10.02; Materialise Technologies, Leuven, Belgium) to determine intrarater reliability of new landmarks for three-dimensional cephalometric analysis before surgery. RESULTS: Five points were located on each image including the midpoint between both uppermost external points of the external auditory meatus (EAM), the center of the sella turcica (sella, S), the most anterior point on the nasofrontal suture in the midline (nasion, N), and the right and left lowest points of the lower edge of the orbitale (r/l orbitale, r/l Or). The horizontal reference plane was then determined using EAM and bilateral Or. The sagittal reference plane was defined perpendicular to the horizontal plane, passing through N and S. The coronal reference plane included the EAM landmark and was perpendicular to the sagittal and horizontal planes. All 5 points had high intrarater reliability and proved easy to use in constructing the new coordinate system. The horizontal, sagittal, and coronal reference planes formed by these respective points improved the ease of performing three-dimensional cephalometric analysis of CLP adolescents with CT imaging. CONCLUSIONS: Our 5 landmarks provided reliable CT-guided three-dimensional cephalometric analysis of CLP, allowing for accurate quantitative assessment in adolescents before orthognathic surgery.

**Publication type:** Journal Article

**Source:** MEDLINE

48. **Title:** Tongue-palate contact during selected vowels in children with speech sound disorders.

**Citation:** International Journal of Speechlanguage Pathology, December 2014, vol./is. 16/6(562-70), 1754-9507;1754-9515 (2014 Dec)

**Author(s):** Lee A, Gibbon FE, Kearney E, Murphy D

**Language:** English

**Abstract:** Abstract There is evidence that complete tongue-palate contact across the palate during production of vowels can be observed in some children with speech disorders associated with cleft palate in the English-speaking and Japanese-speaking populations. Although it has been shown that this is not a feature of typical vowel articulation in English-speaking adults, tongue-palate contact during vowel production in typical children and English-speaking children with speech sound disorders (SSD) have not been reported in detail. Therefore, this study sought to determine whether complete tongue-palate contact occurs during production of five selected vowels in 10 children with SSD and eight typically-developing children. The results showed that none of the typical children had complete contact across the palate during any of the vowels. However, of the 119 vowels produced by the children with SSD, 24% showed complete contact across the palate during at least a portion of the vowel segment. The results from the typically-developing children suggest that complete tongue-palate contact is an atypical articulatory feature. However, the evidence suggests that this pattern occurs relatively frequently in children with SSD. Further research is needed to determine the prevalence, cause, and perceptual consequence of complete tongue-palate contact.

**Publication type:** Journal Article

**Source:** MEDLINE
49. Title: Transillumination of the occult submucous cleft palate.
Citation: Journal of Craniofacial Surgery, November 2014, vol./is. 25/6(2160-3), 1049-2275;1536-3732 (2014 Nov)
Author(s): Caterson EJ, Tsai DM, Cauley R, Dowdall JR, Tracy LE
Language: English
Abstract: Occult submucous cleft palate is a congenital deformity characterized by deficient union of the muscles that normally cross the velum and aid in elevation of the soft palate. Despite this insufficient muscle coverage, occult submucous cleft palate by definition lacks clear external anatomic landmarks. This absence of anatomic signs makes diagnosis of occult submucous cleft less obvious, more dependent on ancillary tests, and potentially missed entirely. Current diagnostic methodologies are limited and often are unrevealing in the presurgical patient; however, a missed diagnosis of occult submucous cleft palate can result in velopharyngeal insufficiency and major functional impairment in patients after surgery on the oropharynx. By accurately and easily diagnosing occult submucous cleft palate, it is possible to defer or modify pharyngeal surgical intervention that may further impair velopharyngeal function in susceptible patients. In this report, we introduce transillumination of the soft palate using a transnasal or transoral flexible endoscope as an inexpensive and simple technique for identification of submucous cleft palate. The use of transillumination of an occult submucous cleft palate is illustrated in a patient case and is compared to other current diagnostic methodologies.
Publication type: Journal Article
Source: MEDLINE

50. Title: Ultrasound-guided surgery of particulate cancellous bone and marrow from the iliac crest for cleft palate.
Citation: Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(743-4), 1055-6656;1545-1569 (2014 Nov)
Author(s): Kamatani T, Shirota T, Kondo S, Shintani S
Language: English
Abstract: Minimally invasive procedures for treatment of disease have become increasingly popular and require specialized instruments and precise imaging guidance. We here propose a technique of minimally invasive surgery with ultrasound echo-guided procedures as a less traumatic and invasive procedure to get particulate cancellous bone and marrow from the iliac crest for cleft palate. This technique has been used successfully at our institutions. Our experience suggests that it can provide reliable ultrasound echo imaging-guided surgery.
Publication type: Journal Article
Source: MEDLINE

51. Title: Usefulness of videofluoroscopic swallow study in treacher collins syndrome with cleft palate: a case report.
Citation: Annals of Rehabilitation Medicine, October 2014, vol./is. 38/5(707-11), 2234-0645;2234-0645 (2014 Oct)
Author(s): Hwang DW, Jung KJ, Kim SY, Kim JH
Language: English
Abstract: A 3-year-old girl had multiple anomalies compatible with Treacher Collins Syndrome (TCS). From the neonatal period, sucking was poor, making tube feeding necessary. Excessive saliva was retained in the oral cavity. Nasal leakage caused by the cleft palate was observed when she spoke. The initial videofluoroscopic swallow study (VFSS) showed a poor posterior bolus transit and nasopharyngeal regurgitation. A delayed swallow reflex and bolus stasis at the vallecular and pyriform sinuses were recognized. Based on the VFSS findings, the patient underwent palatoplasty at 20 months of age. At approximately 23 months of age, a follow-up VFSS was performed; poor posterior bolus transit, nasopharyngeal regurgitation, and delayed swallow reflex were not observed. Finally, the patient was able to eat ground or chopped foods and solid foods orally. We deem VFSS to be helpful in deciding the appropriate management of dysphagia in TCS.
Publication type: Journal Article
Source: MEDLINE

52. Title: Vertical maxillary growth after two different surgical protocols in unilateral cleft lip and palate patients.
Citation: Cleft Palate-Craniofacial Journal, November 2014, vol./is. 51/6(645-50), 1055-6656;1545-1569 (2014 Nov)
Author(s): Bakri S, Rizell S, Lilja J, Mark H
Language: English
Abstract: Objective: The aim of the present study was to compare vertical maxillofacial growth in patients born with unilateral cleft lip and palate (UCLP) who were treated using two different surgical protocols. Design: A

Full text: Available The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association at Cleft Palate-Craniofacial Journal
retrospective cohort study. Subjects: We studied 92 patients with complete UCLP (61 male and 31 female) treated at Sahlgrenska University Hospital in Gothenburg, Sweden: 46 consecutive patients born between 1965 and 1974 who underwent surgical treatment according to the Wardill-Kilner (W-K) protocol and 46 consecutive patients born between 1982 and 1989 who underwent surgical treatment according to the Gothenburg delayed hard palate closure (DHPC) protocol. Methods: We analyzed lateral cephalograms obtained at 10 years of age. Results: Patients treated according to the Gothenburg DHPC protocol had significantly greater anterior upper facial height, anterior maxillary height, overbite, and inclination of the maxilla than those treated with the W-K protocol. Both techniques led to similar posterior upper facial height. Conclusion: The Gothenburg DHPC protocol in patients with complete UCLP results in more normal anterior maxillary vertical growth and overbite and therefore increased maxillary inclination at 10 years of age.

**Publication type:** Journal Article  
**Source:** MEDLINE  
**Full text:** Available *The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association* at Cleft Palate-Craniofacial Journal

---

**Disclaimer and Feedback**

This current awareness bulletin contains a selection of information which is not intended to be exhaustive, and although library staff have made every effort to link only to reputable and reliable websites, the information contained in this bulletin has not been critically appraised by library staff. It is therefore the responsibility of the reader to appraise this information for accuracy and relevance.

This bulletin was produced by Caroline Thomas, Librarian, Salisbury NHS Foundation Trust Healthcare Library. If you have any comments to make about this bulletin please contact Caroline.Thomas@salisbury.nhs.uk.