SLP Tools and Strategies for Spanish-speakers* with cleft lip and palate

*And speakers of a few other languages (Mandarin, Tamil, Hindi)

Bilingual Therapies Symposium 2013

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A brief review of the SLPs role in cleft lip and palate

Introduction to the cleft palate tutorials:
http://www.youtube.com/watch?v=5tuluhnLWHk
More review
Smile Train Virtual Surgery Videos
Volume 2. Secondary Cleft Lip/Palate Surgery

This video is free from Smile Train.
Any copy can be played in English, Spanish, or Mandarin.
www.smiletrain.org

But, sometimes in Latin America glottal stops are not only compensatory articulations
Glottal stops in Guatemala’s Mayan languages
The Question
How can people who have cleft palates repaired during surgical missions learn how to improve their speech when no SLP is available?

Three Principles
1. Build and support the local infrastructure.
2. Create long-term, self-sufficient care.
3. Adhere to the highest standards.
   (Garfein, Hom, and Mulliken, 2008).

Approaches to addressing lack of SLPs
• Sri Lanka SLT program. Started through cleft palate missions.
• Earthspeak. Developed by Andrea and Richard Jobe. Teachers, parents, community health workers attend "speech camps" for intensive practical application of the Earthspeak approach.
• SLP parents training as part of surgical missions.
• International SLP service trips. May or may not have a sustainable focus. (Crowley & Baigorri, 2012; Crowley and Baigorri, 2011; Crowley and Saxman, 2011)

The Cleft Palate Speech Training Project
La Universidad de Istmo
Guatemala City, Guatemala March 2012
and Healing the Children 20th Surgical Mission
Neiva, Colombia, June 2013

Five days
• 8:30 am to 12:30 pm Lecture
• 1:00 to 5:00 Clinical practicum.

The Cleft Palate Speech Training Project
Guatemala City, Guatemala March 2012
• 14 University of Istmo students. 3 were full time clinic faculty in the program of psicopedagogia (learning disabilities).
• Clinic on campus resembled SLP on-campus clinic. Students see clients in small rooms, supervised by licensed psicopedagogas.
• Clinic patients were post-surgical cleft patients from the Dec 2011 Op Smile mission to Guatemala.

The Cleft Palate Speech Training Project
Colombia 2013
• Taking SLPs and adding a specialty area.
• In the pretest we learned they all used non-speech oral motor exercises and felt that cleft patients all needed to increase respiratory strength.
• The 36 clinic patients were identified in the screening day when 175 cleft patients were screened.

The Cleft Palate Speech Training Project
Accountability: Guatemala and Colombia
• Pre-test.
• Quiz each morning on what we covered the previous day.
• On the fifth day, gave them a clinical evaluation using one of the Bolivian videos and also a written exam (aka post-test).
Follow up accountability

- **Guatemala.** In October 2012 gave written final and hands-on clinical competencies evaluation.

- **Colombia.** Skype reviews at 1, 6, and 9 months. Likely to do an in-person visit.

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Building Capacity:
The Cleft palate speech training project

Six video tutorials available on YouTube in Spanish with English subtitles.

1. Introduction to the cleft palate tutorials: [http://www.youtube.com/watch?v=5tuluhnLWHk](http://www.youtube.com/watch?v=5tuluhnLWHk)
2. Eliminating glottal stops for the production of /p/: [http://www.youtube.com/watch?v=Wq7f3CkrkCk](http://www.youtube.com/watch?v=Wq7f3CkrkCk)
3. Strategies for producing /k/: [http://www.youtube.com/watch?v=_1tiigPAidQ](http://www.youtube.com/watch?v=_1tiigPAidQ)

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Building Capacity: The Cleft Palate Speech Training Project

Video tutorials (con't)

6. Feeding video: [http://www.youtube.com/watch?v=w2PHemEX8Mc](http://www.youtube.com/watch?v=w2PHemEX8Mc)

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Speech Sample

- **Articulation Tests** – easily allows to see patterns
- **Syllable Repetition** – isolate phoneme, determine if phoneme specific nasal air emission
- **Sentence Repetition.**
- **Connected Speech** (alphabet, numbers)- hypernasality and nasal emission more apparent since taxing the velopharyngeal system, allows to see overall speech intelligibility, influence of context, and consistency of sound errors
- **Stimulability testing.**

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Sample Sentences

**High Pressure**

- /p/- Popeye plays baseball.
- /b/- Bobby is a baby boy.
- /f/- Fred has five fish.
- /v/- Dave is driving a van.
- “th”- This hand is cleaner than the other.
- /t/- Take teddy to town.
- /d/- Daddy mended a door.
- /s/- Sissy sees the sun in the sky.

**Nasal**

- /m/- Mary came home.
- /n/- Neil saw a robin in the nest.
- “ng”- The bell’s ringing.
- /z/- The zebra was in the zoo.
- “sh”- Sean is washing a dirty dish.
- “ch”- I eat cherries and cheese.
- “j”- John told a joke to Jim.
- /k/- Give Kate the cake.
- /g/- Go get the wagon for the girl.
Low pressure
• /h/- Hannah hurt her hand.
• /l/- A ball is like a balloon.
• "y"- The young chicks are yellow.
• /r/- We were away all year.

Frases de Muestra
• Sonidos Nasales: no deberían estar afectados
  – /m/- Mi Mamá me mima.
  – /n/- Ernesto nació en junio.
  – /ñ/- El niño y la niña cumplen años.
  

Sonidos de Alta Presión
  /p/- El pollo picó pan.
  /b/- Víctor buscó al bebé.
  /d/- Dame el dedo derecho.
  /t/- El Tío Tony tomó té.
  /g/- A Gastón le gusta el gato.
  /k/- Carlos come queso caliente.
  /s/- Siempre sale el sol.
  /ch/- El chico chocó con el coche.
  /t/- Felipe fue a la fiesta.
  

Other sentences in Spanish
  • /p/ papa pie Pepe pela la papa
  • /b/ bebe Bibí Bibi ve al bebe
  • /t/ tato tu Tati ata la tela
  • /d/ dedo di A Darío le duele el dedo
  • /k/ coco kuki Kuki quiere el coco
  • /g/ gol iglú Hago juego de guayaba
  • /s/ sol Susi osos Susi sale Sola
  • /f/ feo fui efe La jirafa fue feliz
  • /j/ jale ojo Julia dejo el ajo
  • /ch/ Chicho ocho Chicho echó la leche
  • /l/ Yuli Lulu lee el libro
  • /ll/ allí yoyo Oye la lluvia allá
  • /rr/ rio erre ir Raúl va al arroyo
  • /m/ Mi mama me ama. /n/ La niña mueve la mona

Parent handouts
Feeding a baby with cleft palate

ALIMENTACIÓN PARA BEBES CON PALADAR HENDIDO

1. Siempre alimente al bebe en una posición erguida, tanto si es del pecho o biberón.
1. Sáquele los gases a su bebe cada 5 minutos.
1. Mantenga al bebe en posición erguida o sentada por 20 – 30 minutes después de cada comida.

Feeding a baby with cleft palate
http://www.youtube.com/watch?v=wZPHemEX8Mc

Smile train (2013). Feeding a child with cleft palate.
• Tamil. http://www.youtube.com/watch?v=Z6BPsdfGihU
• Hindi http://www.youtube.com/watch?v=b64JbzMRYPo
• English http://www.youtube.com/watch?v=I4fNv_yW2X0

Step-by-Step Video Tutorials in Spanish with English subtitles
For SLPs

• http://leadersproject.org/
• http://www.youtube.com/user/LEADERSproject

Addressing the Use of Nonspeech Oral Motor Exercises to Improve Speech


References


