Children's Oral Health Advocacy Project

COHAP MEETING #3

EVENTS

Events

10/18

Brentwood Halloween Carnival

Location: Brentwood Elementary
Time: 12:00 PM – 6:00 PM

10/21

COHAP x UTea Pho

Location: UTea Pho
Time: 5:00 PM – 10:00 PM

10/27 – 10/29

School Trip!

Location: Northeast Early College High School
Time: 8:45 AM – 10:15 AM
and 1:50 PM – 3:15 PM

10/31

Helping Hand Home

Location: Helping Hand Home
Time: 4:00 PM – 5:00 PM

SPEAKER TIME!

austinsmiles
THE AUSTIN PLASTIC SURGERY FOUNDATION

Speaker

austinsmiles

THE AUSTIN PLASTIC SURGERY FOUNDATION

About me

Dr. David L. Guerra

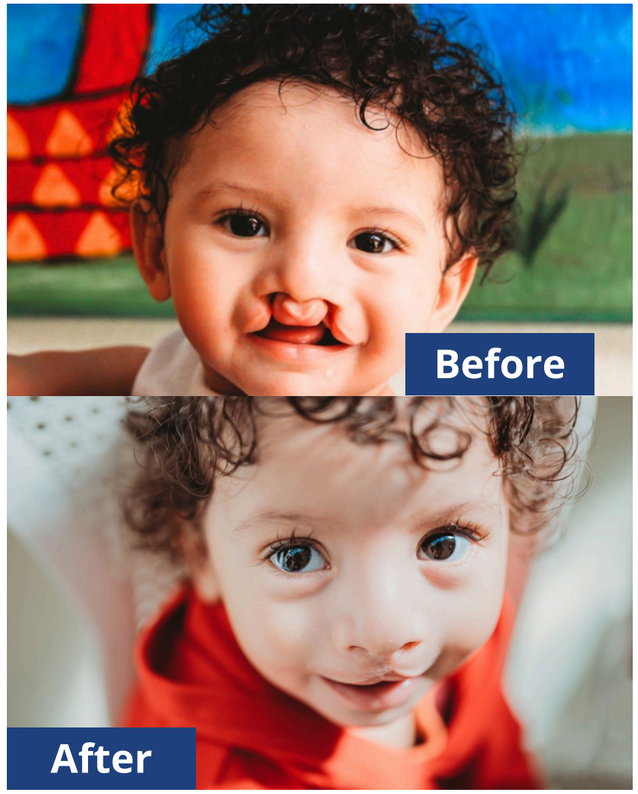
THE OHIO STATE UNIVERSITY
COLLEGE OF DENTISTRY

U.S. AIR FORCE

DDSfrom Ohio StateUniversity College of Dentistry
General Practice Residency from St. Vincent Hospital and Medical Center
Advanced Clinical Residency from 96th Medical Group

Who We Are

Austin Smiles – The Austin Plastic Surgery Foundation is a nonprofit organization whose mission is to provide sustainable surgical and post-surgical care to children born with cleft lip and cleft palate both in **Central Texas and Latin America.**



Dental Services Internationally

Austin Smiles 2025-2026 Sites:

- San Salvador, El Salvador - November
- San Pedro Sula, Honduras - Feb. 2026

Our services:

- Sealants
- Fluoride
- Palatal Obturators

Key Words

Cleft Palate: Congenital split or opening in the roof of the mouth (palate) because the palatal tissues did not completely fuse during fetal development

Palatal Fistula: Communication or opening between the oral cavity and the nasal cavity that can occur congenitally, traumatically, or after a cleft surgery

Palatal Obturator: Removable dental prosthesis used to close an opening in the palate; creates a seal to separate the oral and nasal cavities

Same-Day Palatal Obturator Advantages

Restores speech quickly: reduces hypernasality and helps improve articulation

Prevents nasal regurgitation: prevents leakage into nasal cavity and reduces infection

Improves patient comfort: reduces nasal reflux, irritation, and psychological distress

Cost-effective interim solution: delays the need for a more complex surgery

Same-Day Palatal Obturator Disadvantages

Temporary nature:not intendedfor a long-termsolutioningrowingchildren

Retention issues: may not fit securely due to limited undercut or insufficient teeth

Limited durability: made of cold-cure acrylic materials; prone to fracture

May not completely restore: chewing, swallowing, and speech may be compromised

Assessment

- Review patient history; perform dental exam; and examine size, location, and margins of the fistula/cleft
- Check for undercuts or tissues that can help with retention
- Check for excessive areas of undercut, may need a block-out material
- Evaluate patient cooperation; patient needs to hold still during impression

Select Impression Tray

Proper tray selection is very important!

Tray must be long enough and wide enough to capture the entire arch and allow adequate seating

Select the best fitting tray, then rehearse placing and removing the tray with patient

Dental Impression Material: VPS

VPS =Vinyl Polysiloxane

For upper impressions: use putty instead of cartridges

Working Time and Setting Time: 2 minutes each for VPS
Putty; soft → hard

Excellent dimensional stability and highly accurate:
fine details and resists shrinkage

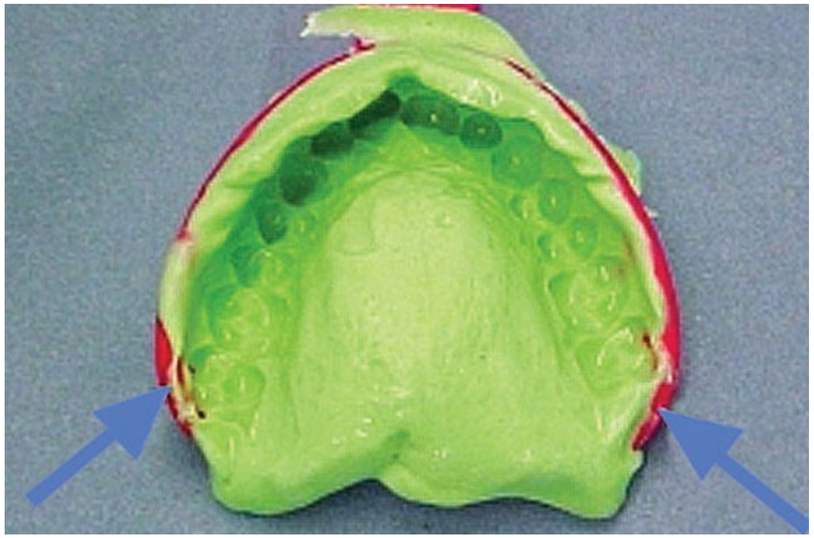
Elastic recovery: no distortion after removal

Multiple viscosities: light, medium, & firm

Odor and taste can be neutral or flavored

Most Common Dental Impression Errors

- Poor tray selection
- Inadequate mixing of impression material
- Impression material started to became firm **BEFORE** tray finished seating



Key Points When Using VPS

- Recheck the height of palatal vault Do
- **NOT** use over ortho brackets & arch wire; difficult and painful to remove tray Place
- equal portions of base and catalyst on the tray cover, materials should not touch Mix, load and seat tray within 2 minutes
- (patient swallows **before** inserting tray) Do **NOT** correct the position of the tray **after**
- insertion; can distort the impression Make sure the impression material has
- completely set before removal

Pour Impression in Lab

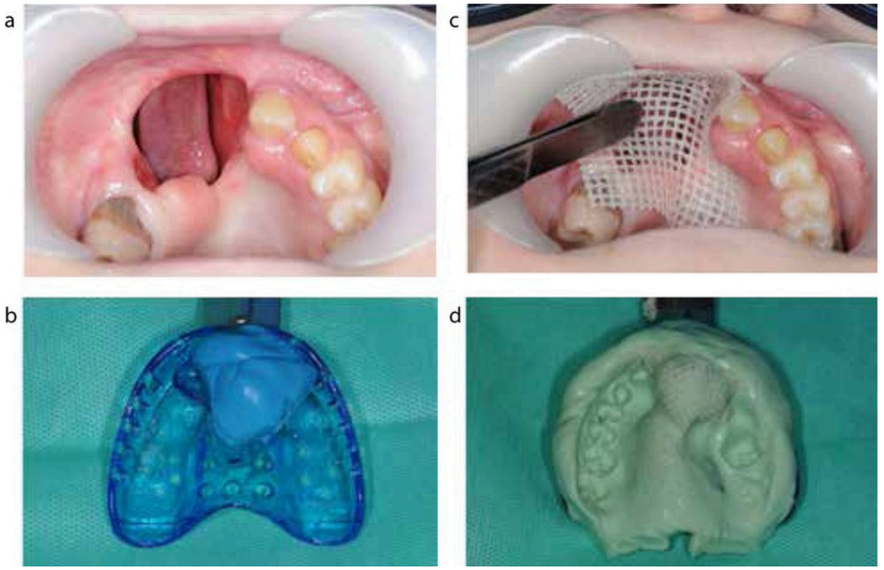
- Pour a slurry of die stone into the impression

- Build base of cast so that the thinnest part is **at least 15mm thick**

- Inspect dental cast carefully for coverage, voids, and any stretch marks

Typical Day Workflow

8am-10am: Make impression & pour with die stone



10am-1pm: Fabricate palatal obturator

- Place cast on a surveyor, mark heightof contour and determine path of placement
- Paint cast with separator
- Mix resin powder + liquid to form a patty
- Incrementally add acrylic resin to rest of design using a salt-and-pepper technique
- Place in hot water, carefully separate

Typical Day Workflow

1pm – 4pm: Palatal Obturator Try-In

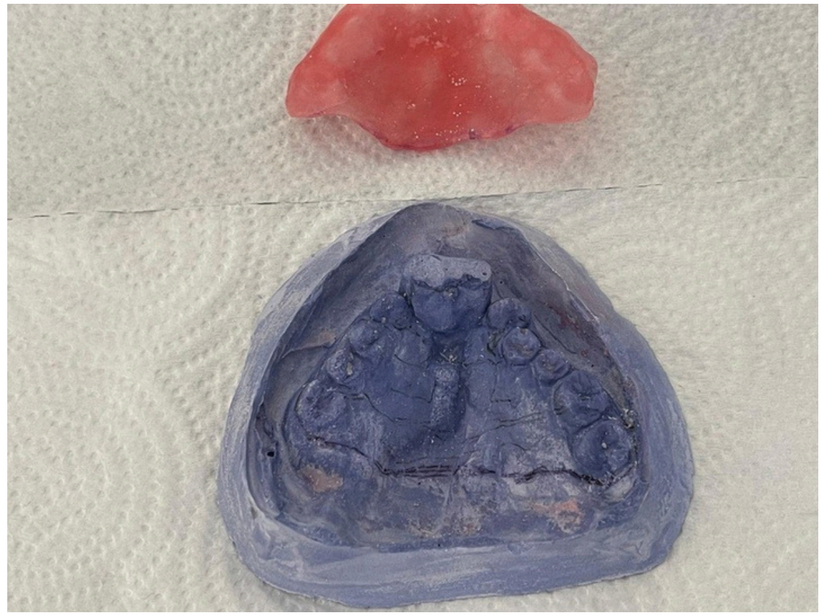
- Show patient how toinsert obturator
- Give patient some water to drink (no water should leak from nose)
- Listen to patient’s speech
- Remind patient that obturator needs to be in the retainer case when not in the mouth

Troubleshooting Tips

Poor retention: use a soft reline and trim with fine scissors or consider a remake

Rebounds: palatal tissue was compressed by setting impression material

- remake with new impression
- avoid by making sure the impression material is soft and pliable during seating



Contact Information

Dr. David L. Guerra

drguerrausa@yahoo.com

THANK YOU!

austinsmiles
THE AUSTIN PLASTIC SURGERY FOUNDATION

@APSF

@austin_smiles

@AustinSmilesTX

@Austin Smiles - The Austin Plastic Surgery Foundation

Q&A

Speaker

THANK YOU!

NEXT MEETING: 10/27

End