# Sensory Transitions Associated with Oral Care

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#### Temperature:

(hot or cold) changes:

Use of cold water

Open mouth for prolonged period of time when at the dentist

Use of air-blower when at the dentist.

# Adaptive solutions for aversion to changes:

- Adjust water temperature
- Frequent breaks
- Cotton swabs or other alternatives to airblow for oral care.

- Cold-water challenges/practice at the house (make a game of it)
- Practice for oral care at home (say "ahhh" or how big is your mouth? Can also make a game of it).

#### Proprioceptive:

(joint) changes

Pressure on teeth

Vibration of drills/equipment

Feeling of biting down on things and releasing.



# Adaptive solutions for aversion to changes:

- Softer bristles
- Flexible brushes
- Low vibration settings?
- Softer items used (Teflon coated, spongy, etc.)

- Oral chews (if safe, OT to order supplies)
- Use of low-setting vibration tool outside the mouth on the jaw to acclimate to proprioceptive input.

#### **Tactile:**

(Touch) Changes

Texture of toothpaste and rinse (gritty? Smooth? Gel-like? Pastey? Watery?)

Feel of metal vs. plastic vs. Teflon

**Bristles movement** 

Light-touch vs. deep-pressure

#### Adaptive solutions for aversion to changes:

- Try different textures based on preference
- Dental tools of different material? thicker/thinner bristles based on preference
- Flexibility and material of toothbrush
- Tools to control type of tactile input (light or deep)

- Introduce similar textured food/condiments to toothpaste and identify similarity for individuals (unless it might incentivize eating inedible toothpaste)
- Oral chews or sensory fidgets (dependent on which is safest to use) of similar tactile property to toothbrushes/dental tools
- Sensory brushing (like a surgical brush or something) with identification to similarity of toothbrush bristles,
- More frequent brushing
- Practice of light/deep pressure outside of the mouth (make a game of it, i.e. "does this feel like wool or Velcro?" or "Push on this. Is it rigid or flexible?")

#### Vestibular:

(balance) changes:

**Reclining of dental chair** 

Bending to spit

Standing upright again

Turning head towards supplies location or for examinations.



# Adaptive solutions for aversion to changes:

- Use of suction tools to avoid need to bend and spit
- Decrease recline
- Keep supplies in central location to minimize need for neck movements

- Spend more time in reclined position
- Try more activities that require bending and turning if safe (do the hokey-pokey)

#### Visual:

(sight) changes

**Florescent lighting** 

White room

**Dental lights** 

White coats



# Adaptive solutions for aversion to changes:

- Sunglasses
- Consider colors and contrast
- Try some darker clothing.

- Practice with increased/different lighting in the home
- Have a white-coat handy to familiarize to dental staff
- Flashlight-tag? (watch the eyes!)

#### **Auditory:**

(noise) changes

Sound of drills

**Running water** 

Verbal feed-back of closed-in spaces (may be claustrophobic)

Sound of brushes on teeth.



- Drown out with preferred music
- Adjust pressure of water to change level/type of noise
- Speed and pace of teeth brushing (faster or slower brushes?)

- More drill sounds outside the dentist office?
- Washing dishes or filling up pots for cooking to acclimate to sound of running water
- Visit closed-in spaces with preferred activities other than brushing teeth

### **Gustatory:**

(taste) changes

**Taste of toothpaste** 

Taste of toothbrush

Taste of dental tools

Taste of water, mouthwash, air, and blood.



#### Adaptive solutions for aversion to changes:

- Different flavors of toothpaste
- Different material of toothbrush
- Different material of dental tools
- Rinse with something besides water?
- Different flavored mouthwashes
- Scented candles, oils, or other way to flavor the air,
- Brush more and floss more to avoid blood taste!
- Acclimation solutions for aversion to changes:
- Foods/candies of similar taste to toothpaste (identify similarity in front of individuals)
- Oral chews of similar-taste material (identify similarity in front of individuals)
- Drink water
- Similar flavored candies/food to mouthwash (identify)
- Taste the air more often in areas similar (maybe express "This air tastes good!")

#### **Kinesthetic:**

(Movement) changes

Riding in the van

Wheeling/walking down the halls/sidewalks

Moving arm back and forth.

# Adaptive solutions for aversion to changes:

- Closer dentist
- Home visits
- Electric toothbrush.

- More community trips
- More walking
- The hokey-pokey.

**Environmental:** 

(all of it together)

White coats!

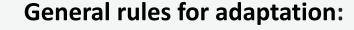
**Dental tools!** 

Florescent lighting!

**Closed spaces!** 

**Drill sounds!** 

**Running water!** 



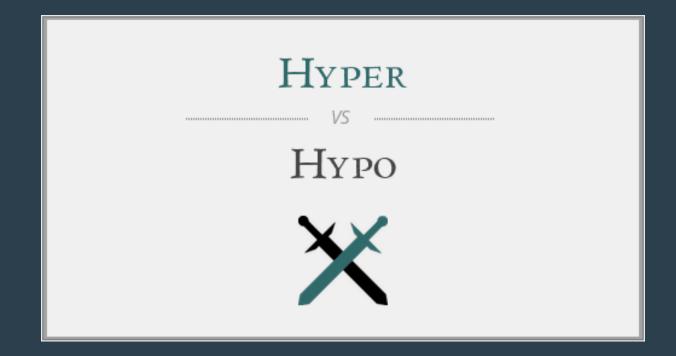
- Change the environment to preference of the individual
- Different clothing, different lighting, different music, different pictures
- Different things to see besides scary instruments that poke at your mouth
- Adapt it to what the individual prefers

#### **General rules for acclimation::**

- Make the transition more familiar
- Example 1: "Who else wears a white coat?" (get yourself a white coat),
- Example 2: "Those tools look kinda like silverware."
- Example 3: "Wow, the lighting in this room is just like the place we play hoops!"
- Example 4: "Small room, kinda like where we do crafts."
- Example 5: "That drill sounds like your white noise machine for sleeping" (what a terrible idea for a white noise machine)
- Example 6"Hey, is he doing dishes in there with all that water?"

## Other Considerations:

 What is the similarity for everything I have proposed so far regarding sensory intervention?



## Our Unique Challenges:

- Some of our folks are non-verbal and cannot identify if they are frightened, in pain, hungry, angry, or why
- Some of our folks have limited verbal skills, and may be able to identify they are angry, frightened, or in pain, but cannot identify exactly why
- Some of our folks are impulsive, and these transitions may trigger their "Flight, Flee, or Freeze" response.
   When this happens, they may not have the ability to respond appropriately, even with redirection
- Some of our folks have flat-affect, and when they are feeling anything, happy, sad, angry, or pain, there is no indication of it until it is too late and impulse takes over
- Most of our folks live with people, their peers, with difficulties like themselves, and require staff to learn coping skills they have not developed

## **Our Unique Opportunity:**

- We can plan and identify communication outside of verbal communication. Identify likes and interests through grimace, muscle tone, motor movement, sign-language, eye gaze, and receptive communication if understanding is present when expression is not.
- We can ask questions, observe the surroundings, and probe the individual who has difficulty identifying what is
  upsetting to better understand why the person is feeling the way they are.
- We can continue to read muscle tone, eye-gaze, and identify pre-cursors to impulse reactions. This will help us understand why a person is behaving the way they are.
- We can set the example, be brave, and try new things that we are afraid of. We can show and learn together
  what healthy things we can do when we are struggling or having difficulty. We can constructively identify we are
  having difficulty and why. Lead by example. Show them how to cope.
- You have clinicians available! We can identify what aversions are present for the individuals! We can identify how
  to acclimate or adapt! Is it tactile? Visual? Auditory? Gustatory? Proprioceptive? Vestibular? We are trained to
  figure this out! Let us help!