

Oral Facial Taping for Feeding and Speech. Results that Stick!

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Therapeutic Taping

Therapeutic taping is a rehabilitative tool for patients with developmental, neurological, acute or chronic conditions. It increases muscle and sensory functions. The tape has a similar elasticity to skin and when applied directly to the skin, the tape can be used to correct oral postures, facilitate muscles that are weak, or relax muscles that are tense to enhance feeding or speech.

Cornerstones of Therapeutic Taping:

- Taping over and around muscles in order to assist and give support or to prevent over-contraction.
- Applying stretch to the tape or to the target area in order to create space under the skin and create the desired effect on the musculature.
- Affecting change in deeper layers of fascia by manipulating the skin and muscle.
- Utilizing a number of corrective techniques to facilitate correct muscle posture and joint alignment.
- Taping does not take the place of traditional interventions but is intended to enhance current practices with new techniques/tools.

Cornerstones Continued

- Increases subcutaneous blood flow which improves sensation.
- Once sensory system activated, affects mechanical receptors
- Decrease inflammation, decrease pressure on chemical receptors
- activates spinal inhibitory system *through stimulation of the touch receptors*
- **See Article:** *Scientific Explanation of Kinesio Tex Tape*

Why we love it

- Can use in place of stretching with population who are aversive to intra/extra oral stretches until tolerance improves
- Additional modality to integrate into current interventions
- Hands free when providing therapy as it is facilitating a functional position during eating or speaking (assisted jaw or lip closure)
- Increases success during a **functional** task thus carry over and neuromuscular re-education occurs
- Gives sensory input, increases awareness
- Caregivers can carry over outside clinic, Train, train train!
Have the caregiver demonstrate competence

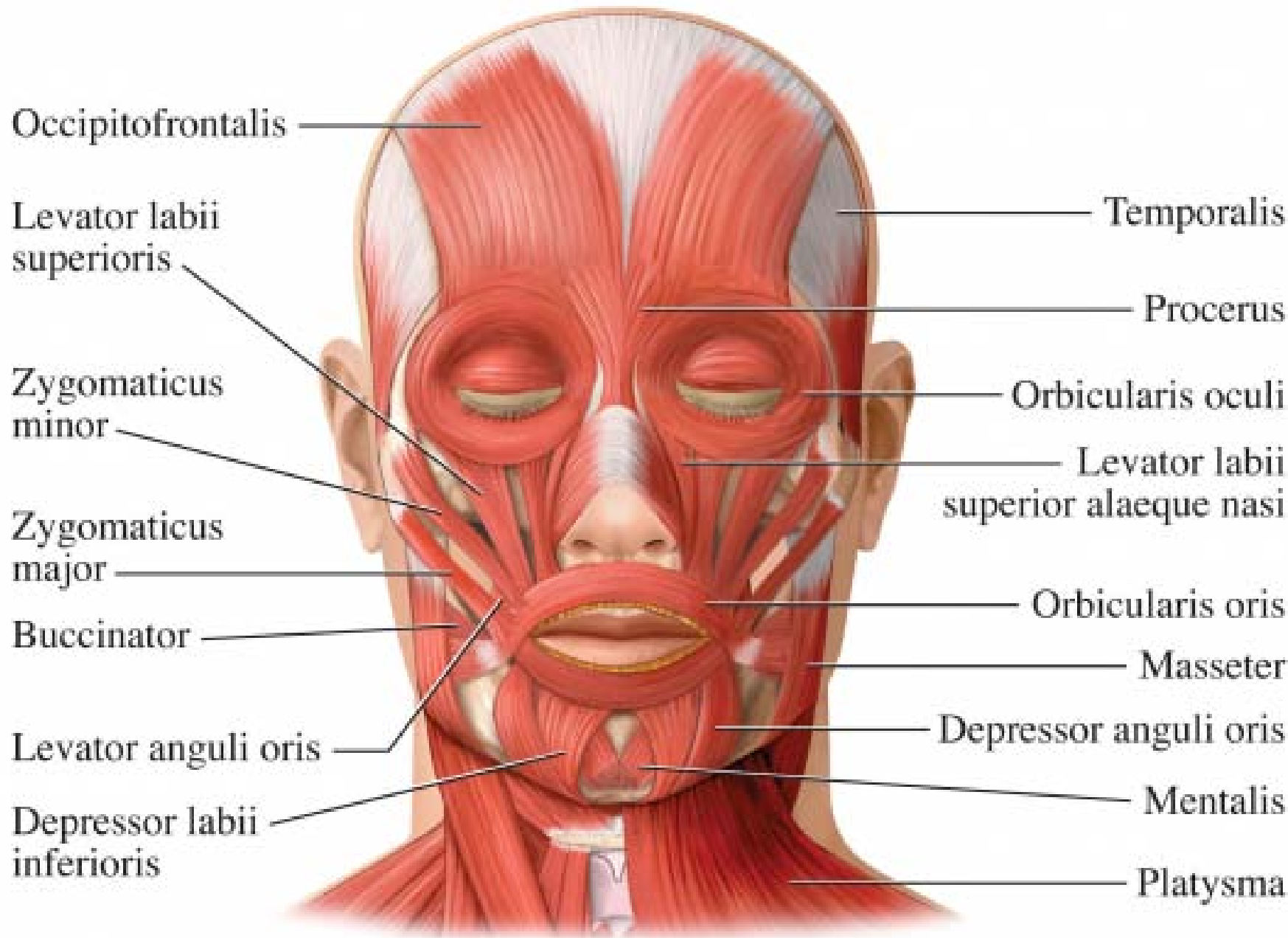
Muscle

Facilitation

vs

Relaxation

- Apply **ORIGIN** to insertion
 - Used to stimulate weak or underused muscles
 - Position desired as able
 - It pulls toward the origin, the direction of muscle contraction
- Apply **INSERTION** to origin
 - Used to relax tight or overused muscles
 - Position desired as able
 - It pulls toward the insertion, the direction of muscle relaxation



Tape basics

- **Positioning**

Place the muscle or muscle group in the position desired; contracted or lengthened if possible. Identify the functional position are you trying to achieve

- **Stretch**

10-40% stretch of tape or skin (paper off tension is 10%)
Longitudinal stretch only To increase intensity, stretch the tape after you have secured it at the anchor point (No stretch at either anchor points, otherwise bruising may occur)

- **Tolerance**

Some placements, especially jaw facilitation can result in overuse and subluxation, or simply over sensory stimulation to face.

- **Anatomy**

Know origin, insertion and function of muscles. Train family quickly for home program/carryover

Application

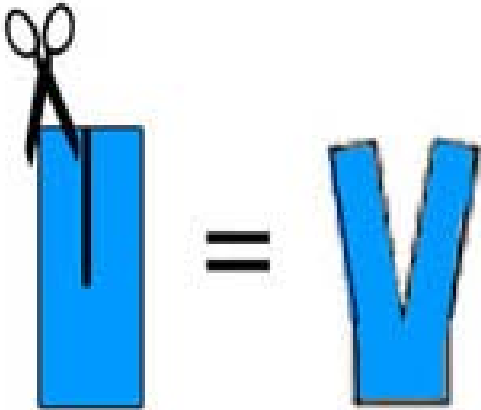
- **Prep skin:** Clean and dry surface. If **allergies** to adhesive (acrylic), may apply skin barrier or Milk of Magnesia to surface (let dry) before applying tape
- **Rub** frequently when applying. Heat from rubbing makes the tape stick. It can resist water, food, and drooling for up to a few days when/if appropriate
- **Special care to remove.** Use agents such as “*remove*” or various oils to soften and remove to protect skin integrity in a top down removal approach

Tolerance

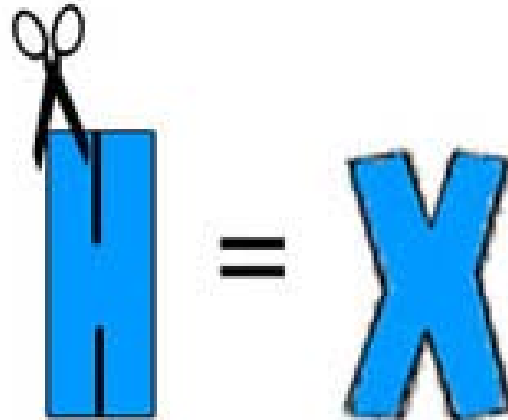
- Generally start at 10-25% stretch for 45 minutes
- Can be worn for 2 days as appropriate
- Tolerance: general demeanor, no signs of overuse, fatigue, or pain signals
- Intolerance: Pain, overuse, over stimulated, subluxation, retraction
- Educate parents carefully when used out of clinic

How to Cut

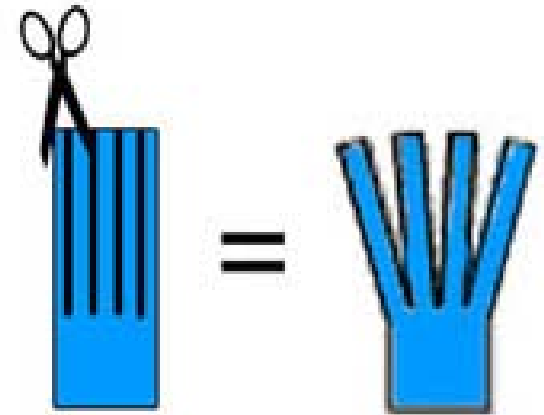
- “Y” cut



- “X” cut



- “fan” cut



- “I” cut = just a strip of tape
- Leave backing on when cutting
- Round edges help with kids who may try and pick off tape

Obicularis Oris Taping

- Origin: alveolar border of maxilla
- Insertion: circumferentially around the mouth, blends with perioral fibers
- Action: closes and protrudes the lips
- Two “i” cut tapes wide enough to fit in between the nose and upper lip without touching the lip directly.
- Anchor at center of mouth above upper lip 1st
- Lay down tape with _____% tension on tape
- Tape should end at corners of upper lip
- Take 2nd piece & anchor at center of lower lip
- Tape should surround mouth and end at the corners
- Ends can overlap slightly

Obicularis Oris Photos

Obicularis Video without tape

Obicularis Video with tape

Obicularis Oris Results

- Pursing of lips
- Mouth Closure
- Improved sensation
- Thus better swallows, less spillage, improved bilabials, increased sensory awareness

Jaw Stability

- Patients with neuromuscular involvement can have decreased jaw stability and difficulty grading movement of the jaw
- Therapeutic taping can assist in improving jaw control and stability for speaking, eating, and increased sensation
- One piece of tape 1.5-2" wide
- "Y" cut with superior tail shorter than the inferior, don't forget left/right sides are different
- Anchor tape to TMJ joint (origin of supporters)
- Apply superior tail diagonally along upper jaw toward lower cheek
- Stretch tape (%) or have pt open mouth, but be sure the jaw does not sublux or retract
- Apply inferior tail along lower jaw
- RUB, rub, rub

Jaw Photos

Before Photo

Jaw Photos

Jaw stability results

- Improve stability at rest
- Improved stability during eating with decreased excursion of mandible in opening
- Improved grading
- Assist with mouth closure
- Resistive strength training
- Increased sensation/awareness
- Decreased saliva loss

Variations

- Facial palsy (fan, obic, depresser)

Conclusion

- Another tool
- Use in functional activity (speech, eating)
- Results generalize after tape is removed
- Home programs

References

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Handouts

- Home Program
- List of placements