Taping in Pediatrics

Orbicularis Oris Taping:  
• Orbicularis oris
• Origin: alveolar border of maxilla lateral to midline of mandible
• Insertion: circumferentially around mouth blends with other muscles
• Action: closes the lips, protrudes the lips

Orbicularis Oris Taping Technique:  
• Use 2 "I" cut tapes, ___ to ___ inches wide.
• Length needed to fit around mouth when fully opened.
• Anchor at center of mouth above upper lip.
• While mouth is open, lay down tape with "paper-off" (10%) tension or pull.
• Tape should end at corners of upper lip.
• Do not place tape on lips, but just outside of lips, outlining mouth.
• Taping with this method has been shown to improve "pursing of lips and mouth closure.
• Children do tire and initial tape is worn for a maximum of 45 minutes, with time gradually increased.

Orbicularis Oris Taping Results:  
• Take second piece of tape and anchor at center of lower lip.
• Tape should surround mouth, following the orbicularis oris muscle.
• Ends should overlap slightly.

• While mouth is open, lay down tape with "paper-off" (10%) tension or pull.

Jaw Stability Taping:  
Children with neuromuscular involvement often have decreased jaw stability and difficulty grading movement of the jaw for chewing. Kinesio® Tex Tape can be applied to assist in improving jaw control and stability for speech and eating.

Jaw Stability Taping Technique:  
• One piece of tape, 1.5 to 2 inches wide, "Y" cut with superior tail shorter than inferior.
• Anchor tape proximal to TMJ joint.

Jaw Stability Taping Results:  
• Apply superior tail with "paper-off" tension diagonally along upper jaw toward lower cheek.
• Improved jaw stability at rest.
• Improved jaw stability during eating, with decreased excursion of mandible in opening mouth
• Improved grading of mandibular movements.

Trials of Kinesio tape have been used with children who present with decreased oral motor control using techniques for: TMJ stabilization, jaw stability to decrease drooling, orbicularis oris for better lip closure.

The orbicularis oris is the major muscle responsible for lip closure. In children with neuromuscular issues, this may be a weakened muscle, due to overstretch from positioning of the head, neck and mouth. Children with varying diagnoses, including cerebral palsy, developmental delay, and dysarthria have been taped.

This nine-year-old girl with cerebral palsy and dysarthria had a significant decrease in drooling at rest, and during eating she showed improved tongue lateralization as well. She was also able to produce bilabial sounds, including "b", "m", and "t" much more accurately. The mechanism of impact may be primarily sensory, due to input directly over the orbicularis oris muscle itself.

Taping for Mouth Closure  
Taping for lip closure may not only decrease drooling, but may improve tongue lateralization as evidenced by the production of bilabial sounds ("b", "m", "p").
Temporomandibular Joint

- Cut two “T” tapes, one inch wide and about two inches long.
- Tear backing, down center and fold back.
- Pull to full tension from center and place diagonally over TMJ joint.

- Place second piece diagonally over first, to form an “X” over the joint.
- This may be done bilaterally to improve jaw stability.
- “X” may be extended forward toward TMJ joint.
- This may be done bilaterally to improve jaw mobility.

Thorough evaluation of TMJ movement is essential, as potential to cause increased pain is possible. Decreased chewing and improved jaw stability have been observed. Decreased bruxism has also been reported in some cases. Improved symmetry of jaw movements is often a result.

CONCLUSION

The use of Kinesio Taping in pediatrics to improve lip closure, jaw stability and oral motor control in pediatrics needs to be further explored. Kinesio Tape provides another tool for use in the therapeutic treatment.

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For more information contact KT A at 888-320-TAPE.