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Disclosures
No relevant disclosures

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Disclosures
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I. Introduction
   A. Lack of consensus regarding etiology, diagnosis & management of TMD. Different types of physical therapy treatments have shown to be effective especially with focus on posture and active exercise. (List 2010)
   C. Commonly associated with cervical spine disorders (La Touche R 2009, Armijo-Olivo 2010)

II. Alignment and movement impairments of adjacent regions should be considered when assessing patients with TMD.
   B. Assessment of alignment / movement of the TMJ and adjacent regions – including cervical spine, thoracic spine, lumbar spine and scapulae is important when evaluating and treatment considerations of TMD. (Uritani 2014, LaTouch 2011, Armijo-Olivo 2011, Ohmure 2008, Olmos 2005, Nicolakis 2001)
   C. Treatment of adjacent region important in management of TMD

III. Movement impairment of the TMJ
   A. Components of movement related to opening of the TMJ – condylar sagittal rotation and translation with corresponding mm function
      i. Sagittal rotation > mandible depressors – Suprahyoid and Infrahyoid muscles
      ii. Translation > primary translator is Lateral Ptyergoid (Mapelli 2009, Matsunaga K 2009)
   B. Movement impairments of TMJ
      i. Primary: Condylar translation greater than sagittal rotation
         1. Increase recruitment of Lateral Ptyergoid over Supra & Infra Hyoid muscles
      ii. Associated: Extend cervical spine during mouth opening
         1. Observed in supine and sitting.
         2. Increased stress to posterior neck structures & decrease use of mandible depressors.

IV. Treatment
   A. First - address adjacent regions
      i. Alignment of lumbar, thoracic and cervical spine along with scapulae alignment
      ii. Movements of adjacent regions – capital cervical flexion, shoulder flexion, abduction with no compensatory cervical or TMJ motions
   B. Second – address TMJ Movement Impairment
      i. Perform limited opening with emphasis on retraction of the mandible
      ii. Palpate condylar sagittal rotation
      iii. No clicking or popping

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V. Patient Cases
A. History
   i. Chief complaint
   ii. Additional complaints
B. Examination
   i. Alignment
   ii. Movement Testing
      1. TMJ motions
      2. Shoulder flexion
      3. Cervical AROM
         a. Passive shoulder girdle elevation test
C. Diagnosis
   i. Key impairments
D. Treatment
   i. Postural correction
      1. Lumbar spine
      2. Thoracic spine
      3. Cervical spine
      4. Resting alignment of TMJ
         a. Tongue on roof of mouth, teeth slightly apart, lips together
   ii. Exercise – for all exercises, address position and movement pattern of the
      spine, scapulae and TMJ
      1. TMJ opening with focus on movement pattern
      2. Wall slides
      3. Capital flexion in sitting, standing, supine
      4. Shoulder flexion back to wall or supine
      5. Shoulder abduction in lateral rotation back to wall or supine
      6. Quadruped
   iii. Functional activity modification
      1. Sitting position
      2. Sleep positioning
      3. Eating, dental care, yawning
      4. Recreational activities
   iv. Taping

References


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