

A Complete Clinician's Approach to Musculoskeletal Management of Temporomandibular Dysfunctions

SUBJECTIVE

History of Present Condition: Jill is a 25 y/o female who is seen in the clinic reporting headaches and right sided jaw/face for 3 years (since she was a senior in college). Jill is a music major who is working on her Master's degree and will finish within the next 6 months.

She states that she has noted that she feels muscle weakness and fatigue (bilaterally) when singing in choir. Her normal schedule includes choir 4-5 times per week as well as practice 3-4 hours per day. She is concerned because she is scheduled to complete a teaching internship this next semester. The internship will require her to perform almost daily but will not usually last more than 2 hours at a time. Jill feels that her symptoms aren't changing regardless of what she is trying.

Symptom description:

When asked to describe her symptoms she provides the following information:

- Began having intermittent joint clicking on the right side about 2 years ago.
- Foods that bother: breads, chewy French breads, penne pasta, vegan burger was difficult to eat
- Foods that she avoids: hard nuts, gum, hard candies, peanut butter and jelly sandwiches,
- She reports that opening the mouth wide does not produce symptoms as much as extended periods of smiling or laughing.
- She feels like she clenches her jaw at night and during the day with stress.

Past medication history:

Acid reflux: has used Protonix to treat x 2 years
Slow motility / digestion
Asthma - severe as a child (hospitalized at 1 y/o)
Wisdom teeth removal 2013
Tonsillectomy 2003
Deviated septum surgery 2012

Orthodontic history:

Pt had braces as a child and wore headgear due to an overbite and a palate expander prior to braces. Jill had her wisdom teeth removed in 2013 (Christmas of freshman year in college) and had difficulty opening her mouth more than 2 finger widths. She had a professor during college that worked on her mouth opening. The professor noted that when she was "reaching" for high or long notes she would remain in retrusion. The professor had Jill work on jaw protrusion as well as relaxing her tongue muscles. Pt has used a soft mouth guard but didn't help and it falls out.



Facial Symptoms

Facial pain location:

- Right ear
- Bilateral general facial muscle and joint ache
- C1 area bilaterally (R>L)

Symptom description:

- Constant aching with occasional stabbing pain in C1 area
- Throbbing with increased activity
- Right ear fullness

Symptom irritability:

- Pain now: 2/10 pain worst: 6/10 pain least: 2/10
- Aggravating factors: increased jaw activity, clenching, eating chewy foods, smiling, talking
- Alleviating factors: ibuprofen, massage
- 24 hours: worse in AM pain

Sleeping position:

- She is trying to sleep on L side to help reduce reflux

Headache Symptoms

HA pain location:

Start at base of skull and travels above ear and to eye

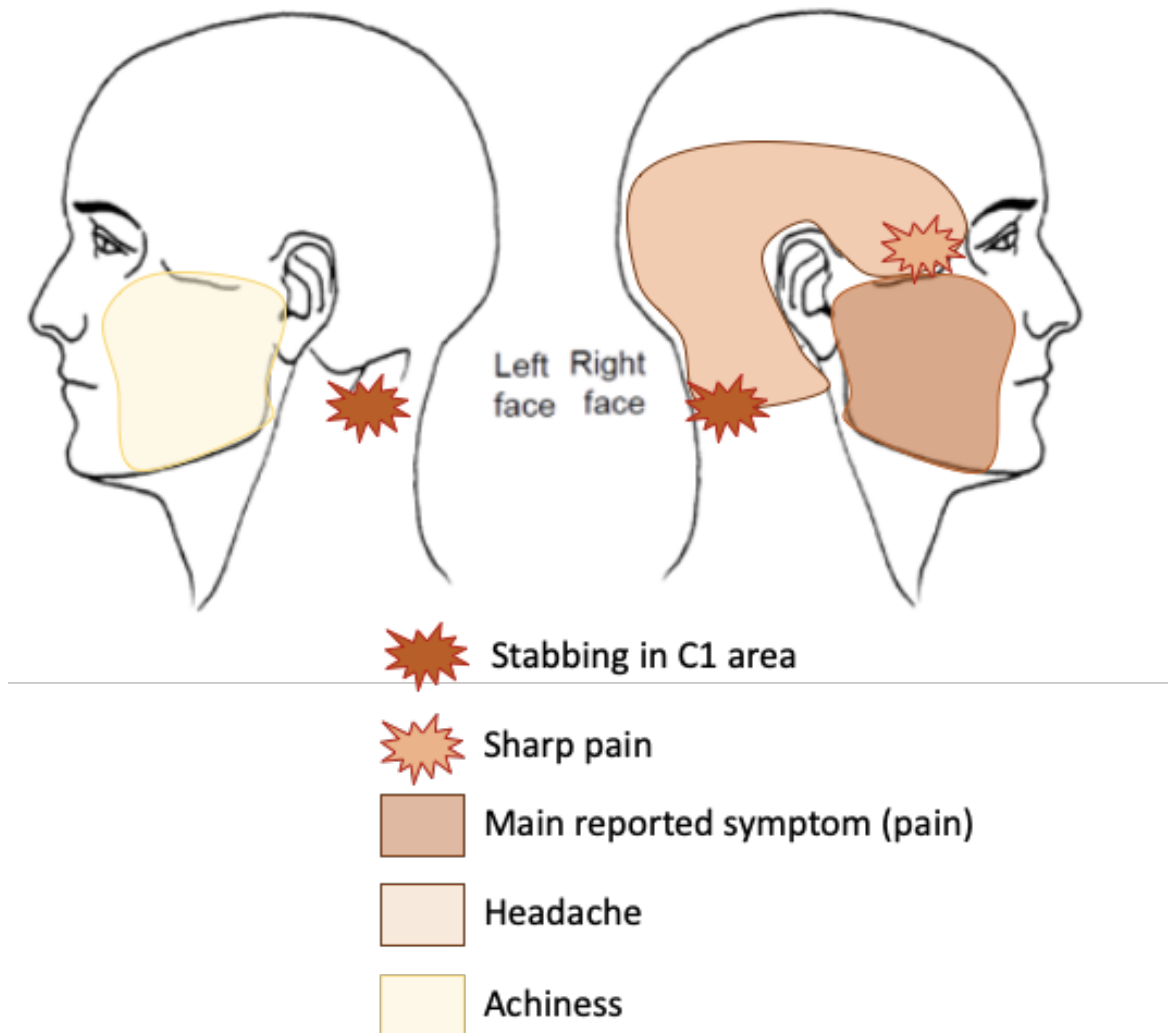
Symptom description:

Aching with occasional stabbing in C1 area that occurs with sharp pain behind the eye

Symptom Irritability:

- Pain now: 1/10 Pain worst: 7/10 Pain least: 0/10
- Frequency of HA: 2x/week
- Aggravating factors: wakes up with HA many times, increases after a meal where she has to chew a lot, and increases towards end of day with increased muscular use
- Alleviating factors: Excedrin extra strength, sleep, pulling hair at base of neck, massages every 4-6 weeks, self-massage (orbits and temples)
- 24 hours: unsure - has HA at all times of day.
- Hx of migraines in high school - these are not the same headaches.
- CSS: (-)

Pain diagram



Objective findings

Posture: Posture Forward Head, Rounded Shoulders

Cervical AROM: Grossly normal with some discomfort during extension and tightness in the left upper traps with left side bending.

Local cervical testing: decreased R C2-3, C3-4

Upper Cervical testing:

Flexion w/ rotation test: limited to R

Side nodding: limited to R

Jaw ROM:

mouth opening: 38 mm

wide opening: 42 mm
lateral excursion to L: 10 mm
lateral excursion to R: 7 mm with clicking
protrusion: functional ROM
Mouth opening: "S" wobble with opening and closing

TMJ joint play:

joint play TMJ: decreased L w/ anterior/inferior mobility/ increased on R

Jaw Strength: Grossly normal except bilateral lateral excursion (4/5). Mild discomfort reported with protrusion tests

UE screen: Grossly normal

Special Tests:

Neck flexor endurance test: 7 seconds

Alar / TLA (-)

Lindgren: (+) R

Cotton Roll Test: (+) on R when biting on R, decreased when biting on left

Palpation (all reproduce pt's myalgia pain within 2 seconds without radiating pain – no reproduction of HA):

Masseter Temporalis

Medial pterygoid

Posterior Digastric muscle R

TMJ on R is uncomfortable with palpation

Clinical Impression: Pt presents with signs and symptoms of myalgia pain and facial muscular tension, restrictions in jaw mobility leading to improper joint mechanics and joint clicking. Pt presents with cervical segmental stiffness at C2-3, C3-4 with upper cervical restrictions. Pt presents with cervicogenic HA due to upper and mid-cervical dysfunction and not due to TMJ pain as muscular palpation did not reproduce HA pain – only myalgia pain.

Problem list:

1. Upper cervical hypomobility
2. Mid-cervical hypomobility
3. Rib hypomobility R
4. TMD local myalgia pain
5. Joint clicking
6. Asymmetrical mouth opening – indicating muscular weakness and / or disc dysfunction
7. Decreased muscular strength
8. Bruxism – clenching with possible grinding