

CLINICAL REASONING FORM

STUDENT: S. Owens

DATE: 2/23/12

PATIENT'S NAME: D. H

Body Chart--Initial hypothesis: lower cervical facet joint pain/referral

SUBJECTIVE EXAM

Primary HYPOTHESIS after subjective examination: Cervical instability/motor control dysfunction

Differential List: 1. Cervical instability/motor control dysfunction. 2. Cervicogenic headache (OA joint left > right) 3. C1/C2 hypomobility/dysfunction 4. Cervical DDD/DJD (C4-C7) 5. Cervical sprain/strain 6. Chronic WAD

STRUCTURE at Fault:

Table with 4 columns: Joints in/refer to the painful region, Myofascial tissue in/refer to the painful region, Neural tissue in/refer to the painful region, Other structures that must be examined - non MSK. Rows include C1/C2, OA, C5-C7 facet joint, Gleno-humeral, Clavicle, 1st Rib, Suboccipital mm., Multifidus, Scalenes, Levator scapulae, Upper trapezius, C4-C7 Nerve Roots, Brachial plexus, and Upper cervical ligament laxity (transverse/Alar) Vertebral Artery.

Subjective Asterisks Signs/Symptoms

(Aggravating/easing factors, description/location of symptoms, behavior, mechanism)

- 1. Sharp pain (suboccipital)/headache
2. Best in am, worse as day progress
3. Progressive fatigue ("difficulty holding head up")
4. Relieved with lying down
5. H/O significant WAD (>15 years)

Physical Exam Asterisks Signs/Symptoms

(Special tests, Movement/joint dysfunction, posture, palpation, etc.)

- 1. Tenderness/guarding in suboccipital region
2. Dec. OA flexion
3. Poor deep neck flexor activation/endurance
4. Fibrosis @ scalene, levator scapulae
5. Limited cervical rotation (L>R)

* Classification: 1. Conditioning and Endurance 2. Cervicogenic Headache 3. Mobility

Are the relationships between the areas on the body chart, the interview, and physical exam consistent? Please explain areas that may need clarification Yes

Rate your assessment of Severity & Irritability

Justify your assessment with examples from the Subjective Exam &/or Objective Exam

o Severity Non Min Mod Extreme

Increasing difficulty working in kitchen, decrease tolerance/endurance with hiking, increasing difficulty turning head with driving

o Irritability Non Min Mod Extreme

Continued soreness following MD appointment (~ 1 week); soreness, ache following mid-range to end range contract/relax of cervical rotators

Stage & Stability?

- o Acute Subacute **Chronic** Acute or chronic
- o **Stable** Improving Worsening Fluctuating Red Flags

Identify any potential risk factors (Yellow, Red flags, non MSK involvement, biopsychosocial)

Upper cervical ligament laxity (h/o WAD, suboccipital headache, and decrease ROM)

Identify “gap” in knowledge. Patient or Problem	Intervention	Comparison Intervention	Outcomes	
Tips for Building	Starting with your patient, ask “How would I describe a group of patients similar to mine?” Balance precision with brevity	Ask “Which main intervention am I considering?” Be specific	Ask “What is the main alternative to compare with the intervention?” Again, be specific	Ask “What can I hope to accomplish? Or What could this exposure effect?”
Example	In patients with lateral epicondylitis.....	Would adding manipulation to modalities or injection alone.....	When compared to modalities or injection alone	Reduce the number of visits to return to pain free function..

Your Patient

1. *In patients with Cervicogenic headaches, is cervical manipulation/mobilization better than exercise in reducing headache symptoms?*
2. *In patients with decrease upper cervical ROM associated with chronic WAD does manual therapy compared to self stretch/exercise improve ROM?*
3. *Does deep neck flexor strengthening and cranio-cervical flexion exercises improve functional activity/tolerance in patients with cervical instability?*

Article Reviewed: Falla, D, Jull, G, Hodges, P. Training the cervical muscles with prescribed motor tasks does not change muscle activation during a functional activity. *Manual Therapy. 2008; 27:507-512.*

What did you learn from article to apply to clinical case?

1. A six week program of cervical flexion muscle training reduces symptoms/pain and improves muscle performance, but it does not alter or change a motor control pattern when applied to a functional task/activity.
2. In treating patients with cervical motor dysfunction/instability, interventions/exercises need to also include those from a functional posture/task.

Treatment planning

Impairments	Functional limitations	Goals
Cervicogenic Headache	Dec. activity tolerance	Dec. head frequency/intensity
OA hypo mobility	Difficulty rotating/turning to drive	Able to rotate/turn during driving
C1/C2 hypo mobility	Difficulty turning/rotating	
Fibrosis scalene/levator scapulae	Difficulty turning/rotating (driving)	
Dec. endurance of deep neck flexors	Dec. ADL/hiking endurance	Improve ADL/activity (hiking) tolerance

What are you going to re assess at subsequent visit? OA flexion, C1/C2 mobility, mid-cervical segmental mobility

What is your primary treatment Objective after initial evaluation? Decrease headache symptoms, increase rotation ROM

Education: posture, reduction in forward head posture

Manual Therapy: OA flexion mobilization, C1/C2 contract-relax, soft tissue mobilization Scalenes

Exercise Prescription: scapular stabilization with corrected and sustained cervical lordosis

Other: Deep cervical flexor activation/recruitment, functional movement patterns

Prognosis/Expectations:

How do you expect to progress your treatment program over subsequent visits?

- Deep cervical flexor strengthening (supine to prone to pulleys)
- Continue to assess and treat soft tissue mobility (scalene, suboccipital)
- C1/C2 mobility (mid-range to end range motion)

Associated Factors for expected outcome - What specific components of her presentation is favorable/unfavorable for expected outcome/prognosis?

Favorable

Highly motivated
Previous level of function

Unfavorable

Worsening ROM-Upper motor neuron signs, CNS involvement (upper cervical instability)
Chronicity of symptoms (history of WAD)
High Disability Score (NDI 40%)

If referral to other providers is indicated, Identify: Specific Recommendations.

Identify the key subjective and physical features (i.e. clinical pattern) that would help you recognize this disorder in the future.

SUBJECTIVE

- Decrease endurance, fatigue with activity.
- Best in am, worse as day progress
- Sub-occipital HA/Cervicogenic HA
- H/o MVA with significant WAD.

PHYSICAL

- Poor deep neck flexor activation, recruitment, endurance
- Forward head posturing
- Hypo mobility of adjacent levels (OA and C1/C2)
- Dec. soft tissue mobility (scalene, suboccipital levator scapulae)
- Soft tissue irritability/guarding in cervical musculature.