

"Pain in the Neck" - Neck Pain and Headaches

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Introduction

Daniel Gross PT, DPT, CMPT

- Graduated from Touro School of Health Science in Manhattan, NY in 2008
- Certified Manual Physical Therapist from North America Institute for Manual Therapy (NAIOMT)
- Proud to be working at Dow since 2017





Nazish Javed PT, DPT, Cert. MDT, CSCS

- Doctorate of Physical therapy from Nova Southeastern 2008
- Certified in Mechanical Diagnosis and Therapy (MDT) from the McKenzie Institute
- Certified Strength and Condition Specialist from the National Strength and Conditioning Association
- Certification in Functional Dry Needling from KinetaCore
- Proud to be at Dow Family Health Center- Lake Jackson since 2015



OUR MISSION

We provide innovative, high-value health care solutions to companies, *improving the health and well-being* of the people we serve.

OUR VISION

We will transform the delivery of health care as a **trusted partner** to the employers we serve. **Together,** we will create a culture of health and **become our patients' most cherished benefit.**



Outline

Anatomy

Stages of disc herniation

Cervical spine

Related Impairments

- Shoulder pain
- Elbow pain
- Headaches

Treatments

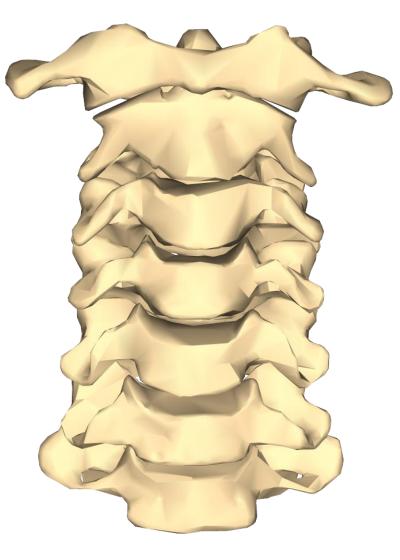
Ergonomics

Questions

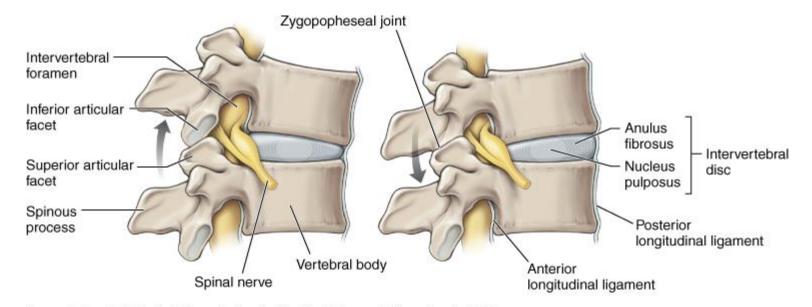


Anatomy of Cervical Spine







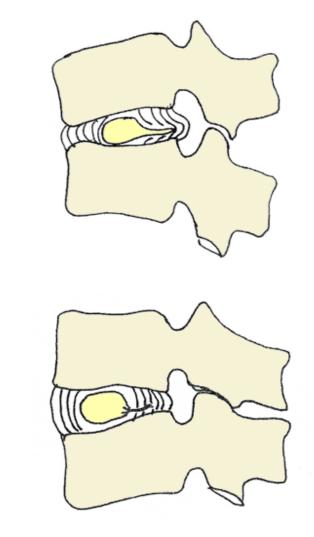


Source: Dutton M: Dutton's Orthopaedic Examination, Evaluation, and Intervention, 3rd Edition: www.accessphysiotherapy.com

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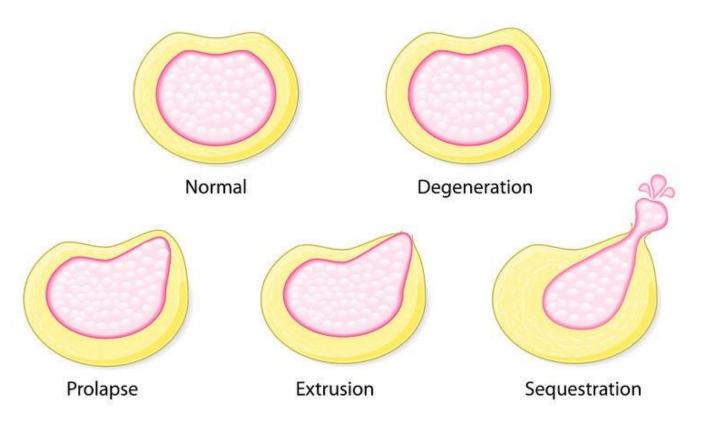
Bulging Disc or Disc Derangement





Bulging Disc or Disc Derangement

STAGES TO A DISC HERNIATION





The economic burden due to disorders of the neck is high and includes costs of treatment, lost wages, and compensation expenditures.

Disability-related to neck pain can significantly impact workforce productivity and the economics of households and communities.

It costs around \$38 billion per year in the U.S

Cost of of Anterior cervical discectomy and fusion surgery is approximately \$24,000



The most common cervical condition is cervical disc degeneration, which affects 95 % of men and 75 % of women by age 65.

Disc degeneration and cervical spinal stenosis, emerge as a result of age-related degeneration of the spine.

Cervical problems can also emerge as a result of injury, poor posture, and diseases such as Rheumatoid arthritis and Osteoarthritis.



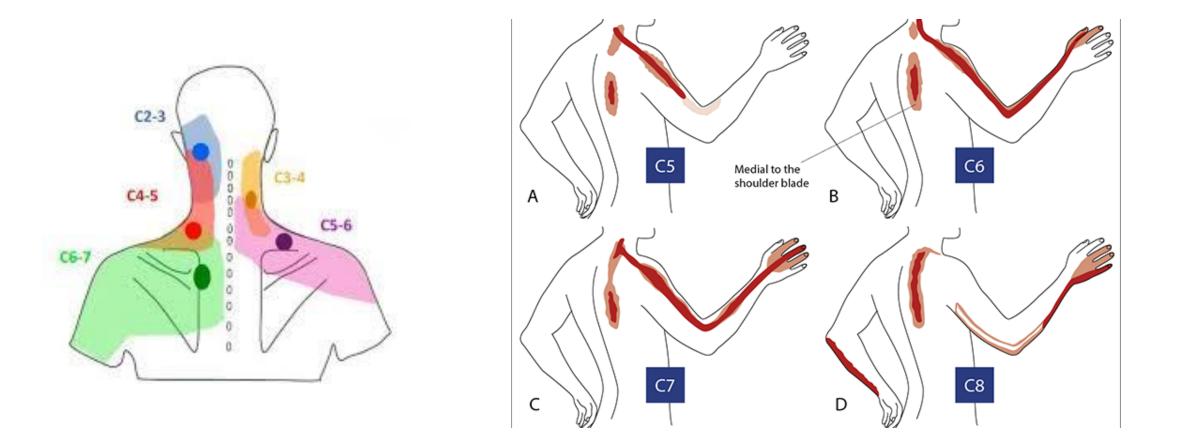
Cervical Spine



Common symptoms:

- Centralized neck pain
 - Shoulder pain
 - Arm pain
 - Headaches,
- Numbness or tingling
 - Sensory Loss

Cervical Pain Referral Patterns





While rare, there are a few conditions that cause neck pain that require immediate medical attention. Seek **<u>immediate</u>** care if you experience the following:

You should also alert your care provider if your neck pain is accompanied by the following signs or symptoms:

- Your neck pain is the result of a fall or an accident
- You are 70 years or older with new onset of neck pain
- Pain that does not go away, even at night or when laying down
- Weakness in one or both arms
- Unexplained fever

Ge QuadMed

- Unexplained weight loss
- History of cancer, weakened immune system, or osteoporosis

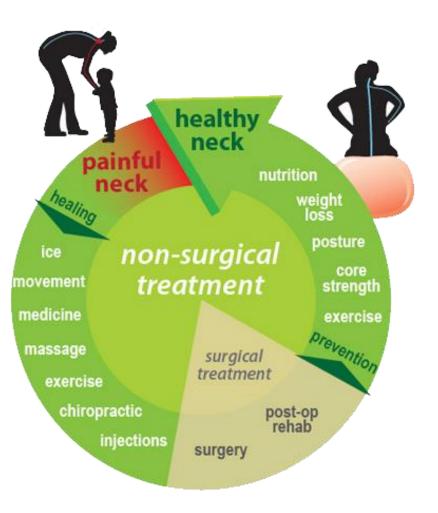




Treatments for Neck Pain

Oral medications Physical therapy Chiropractic Treatment Pain management Surgery

Etc.







Scientists found those whose first treatment was physical therapy had a dramatic decrease in the likelihood of being prescribed opioids of pain.

Patients who could benefit from physical therapy are not getting it

Provide noninvasive treatment as the first line of defense against neck pain.



What can a Physical Therapist do to treat my pain?



ASSESS: Not all neck pain is the same. Your PT will evaluate you and identify the factors that contribute to your pain. Your PT will then plan treatment that is individualized just for you.

TREAT:

Treatment may include the following:

- Manual therapy, including spinal manipulation
- Specific strengthening and flexibility exercises
- Education about how you can take care of your neck; training for proper bending, lifting, sitting, doing chores and daily activities at work and home, and sleep positions
- Dry needling
- Ice, heat, electrical stimulation to help relieve pain



Surgery

Indicated for 5% of the 56 million Americans seeking relief for neck pain

54% of people find relief from neck pain after surgery

Physical therapy

Physical therapy is another standard treatment and was rated effective 48% of the time.

46% of those patients find relief from physical therapy for the treatment of neck pain



NECK STRETCHES



Neck Stretches



SHOULDER ROLLS

Video # VV9BWMBMJ

Move your shoulders in a circular pattern as shown so that your are moving in an up, back and down direction. Perform small circles if needed for comfort. Repeat1 TimeHold1 SecondComplete1 SetPerform3 Times an Hour



UPPER TRAP STRETCH - HAND BEHIND BACK

Place your arm behind your back. Next, tilt your head to the side. Hold for a stretch. Return to original position and then repeat.

Video # VV5VP9ELX

Repeat3 TimesHold30 SecondsComplete1 SetPerform3 Times a Day

LEVATOR SCAPULAE STRETCH - HAND BEHIND BACK

Place your arm on the affected side behind your back and then tilt your head to the side, then rotate to the side, then tip downward towards the opposite side as in looking at your opposite pocket.

You should feel a gentle stretch at the side/back of your neck.

Video # VVXDACWAB

Repeat	3 Times
Hold	30 Seconds
Complete	1 Set
Perform	3 Times a Day





Ergonomics



CORRECT

INCORRECT

INCORRECT





Ergonomics





Incorrect 1. The laptop screen is too close and too low.

Incorrect 2. The viewing distance is too far and the screen is too low.



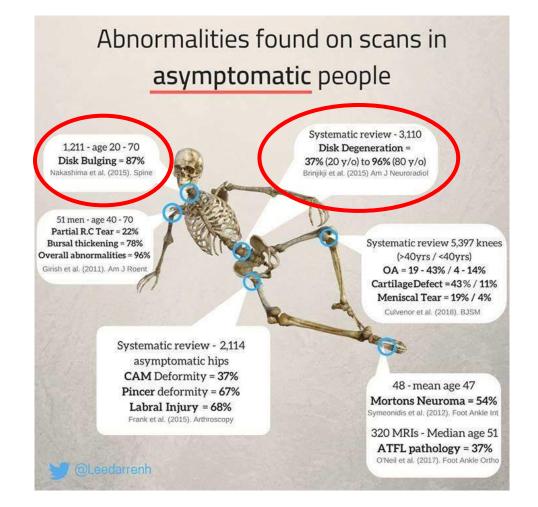
3. Correct viewing distance, but back and neck strain.



Correct 4. Correct posture and viewing distance because of the K laptop stand.



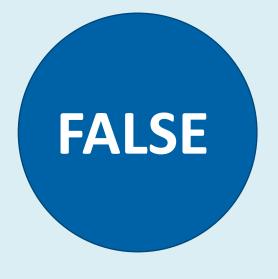
Should I get an MRI?



- There is an extremely high rate of false positives on MRI images. Anatomic abnormalities from x-rays, MRI, and CT scans DO NOT correlate strongly with symptoms.²
- According to the American College of Radiology and recent evidence-based guidelines, MRI is discouraged except for the following "red flag" conditions:
 - Severe trauma
 - Infection
 - Cancer
 - Cauda equina syndrome



"I need an x-ray or MRI to show what's wrong with my neck."



- Imaging is NOT recommended for routine treatment of acute neck pain and can lead to unnecessary treatment.⁴
- People who are initially prescribed advanced imaging, such as MRIs, over physical therapy for management of neck pain ultimately pay more and are more likely to have surgery or injections or to visit an emergency room.



"My pain is so bad that my doctor will probably want to prescribe an opioid."



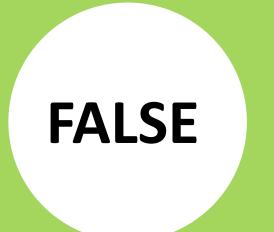
The Centers for Disease Control and Prevention guidelines recommend opioids for neck pain **only** after lower risk treatments have been tried, and then only when dosed appropriately and combined with nonopioid treatments, like physical therapy and exercise.





True or False?

"I need to see my doctor before I go see a physical therapist for my acute neck pain."

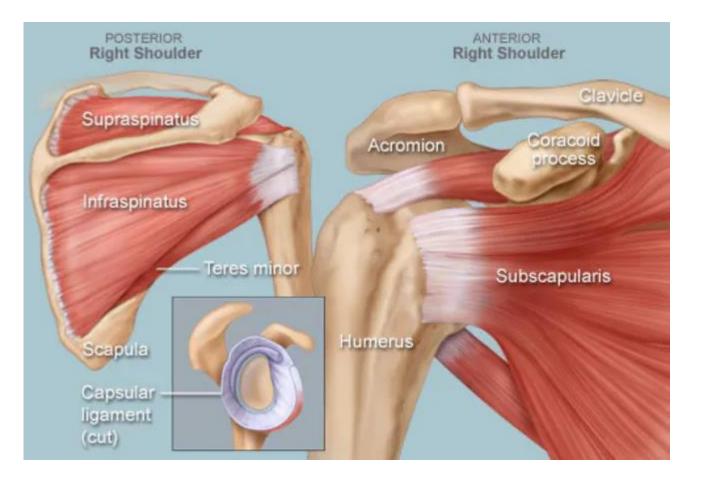


Many states have Direct Access so you don't even need to see your medical provider before starting PT!



Shoulder Pain

- Rotator Cuff
- Labral Tears
- Bicipital Tendinopathy
- Impingement Syndrome
- Adhesive Capsulitis (Frozen Shoulder)





Elbow Pain

- Lateral Epicondylitis (Tennis Elbow)
- Arthritis

Tennis elbow





HEADACHES

QuadMed

Migraine Headaches

- One-sided, may shift from one-side to another
- Women more than men
- Lasts 4 to 72 hours
- At least one
 - Nausea, vomiting
 - Photophobia, phonophobia
- 2 of these 4
 - One-sided
 - Moderate to severe intensity
 - Increased with physical activity
 - Pulsating quality

Tension Type Headaches



Lasts from thirty minutes to seven days

Head and neck pain

Muscle tightness

At least 2 of the following

- Bilateral location
- Bilateral pressing headache
- Mild to moderate intensity
- Not increased with physical activity



Sudden attacks of facial or frontal pain last a few seconds to less than two minutes.

No neurological deficit

Pain has some of the following characteristics:

- Distribution along one or more division of the trigeminal nerve
- Sudden, intense sharp, superficial, stabbing or burning in quality
- Pain intensity is severe
- Between attacks the patient is entirely asymptomatic
- maybe triggered by certain daily activities such as eating, talking, washing the face or cleaning the teeth.



Cervical Headache refer to headaches arising from dysfunction or inflammation of the musculoskeletal structures of the upper cervical spine

The World Cervicogenic Headache Society has defined cervicogenic headaches as referred pain perceived in any part of the head and caused by musculoskeletal tissues that are innervated by the cervical nerves (C1-C3).



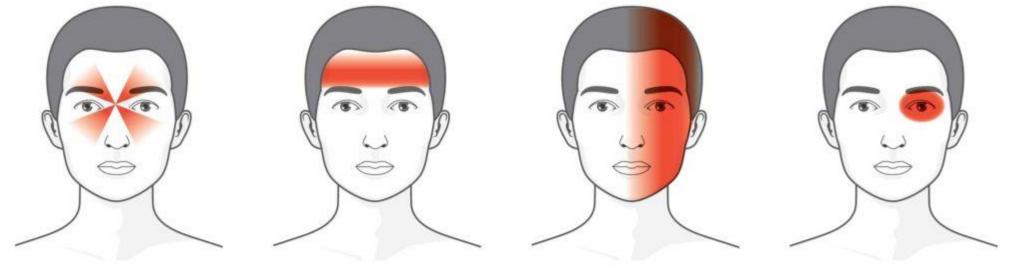
Other Causes of Headaches

- Sinus
- Ear infections
- Eye pathology
- Rheumatoid arthritis
- Systemic lupus erythematosus
- Psychological disorders.



Types of Headaches

HEADACHE TYPE



Sinus

Tension

Migraine





- Exercise- stretching, strengthening, and endurance exercises are beneficial in reducing pain, frequency of headaches, and headache intensity
- Cervical/thoracic thrust and non-thrust mobilization for subacute and chronic neck pain with headaches
- Combination of cervical manipulation and mobilization with exercise is more effective in reducing neck pain and headache than manipulation and mobilization alone.



Questions





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