



# **SIMPLE SOLUTIONS FOR NECK PAIN**

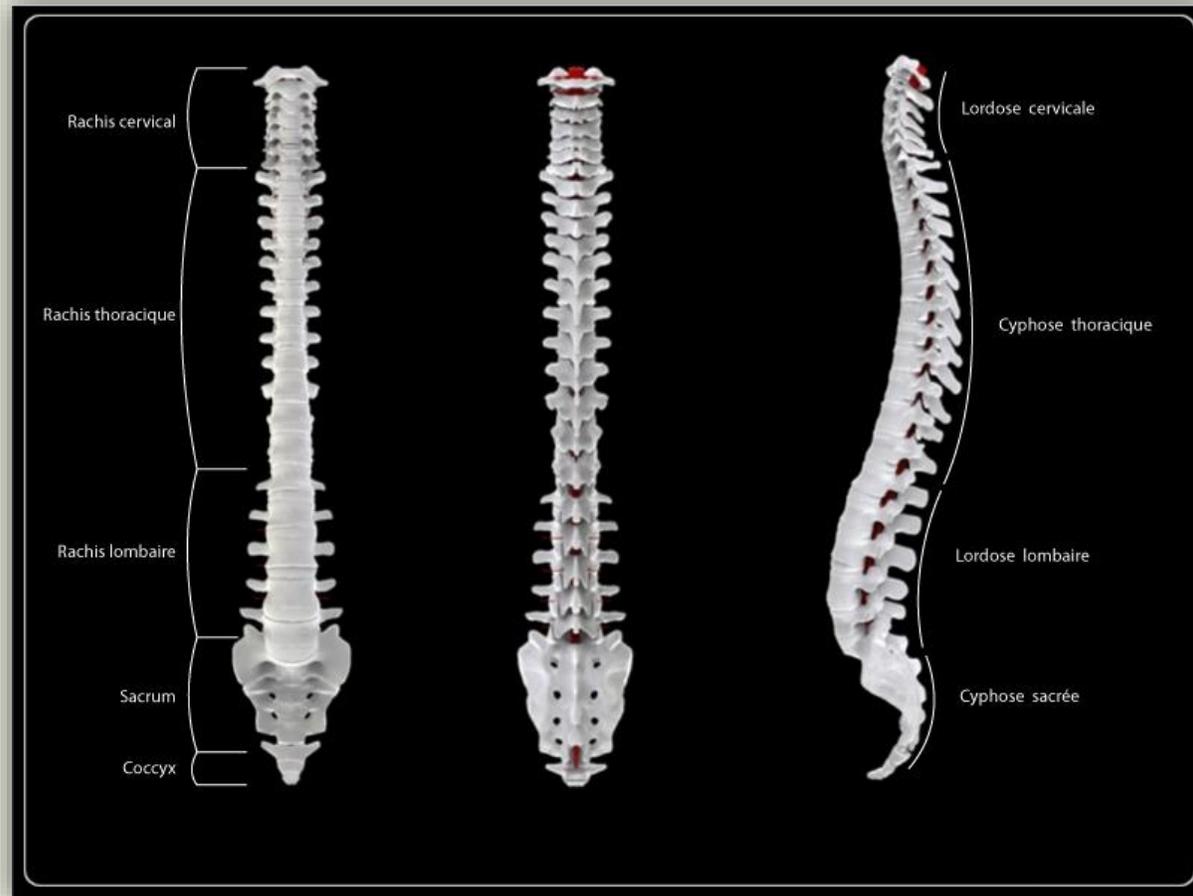
Lisa Sitek, BSEE, MSPT  
ALL ABOUT YOU PHYSICAL THERAPY, LLC

# INTRODUCTION OF SPEAKER

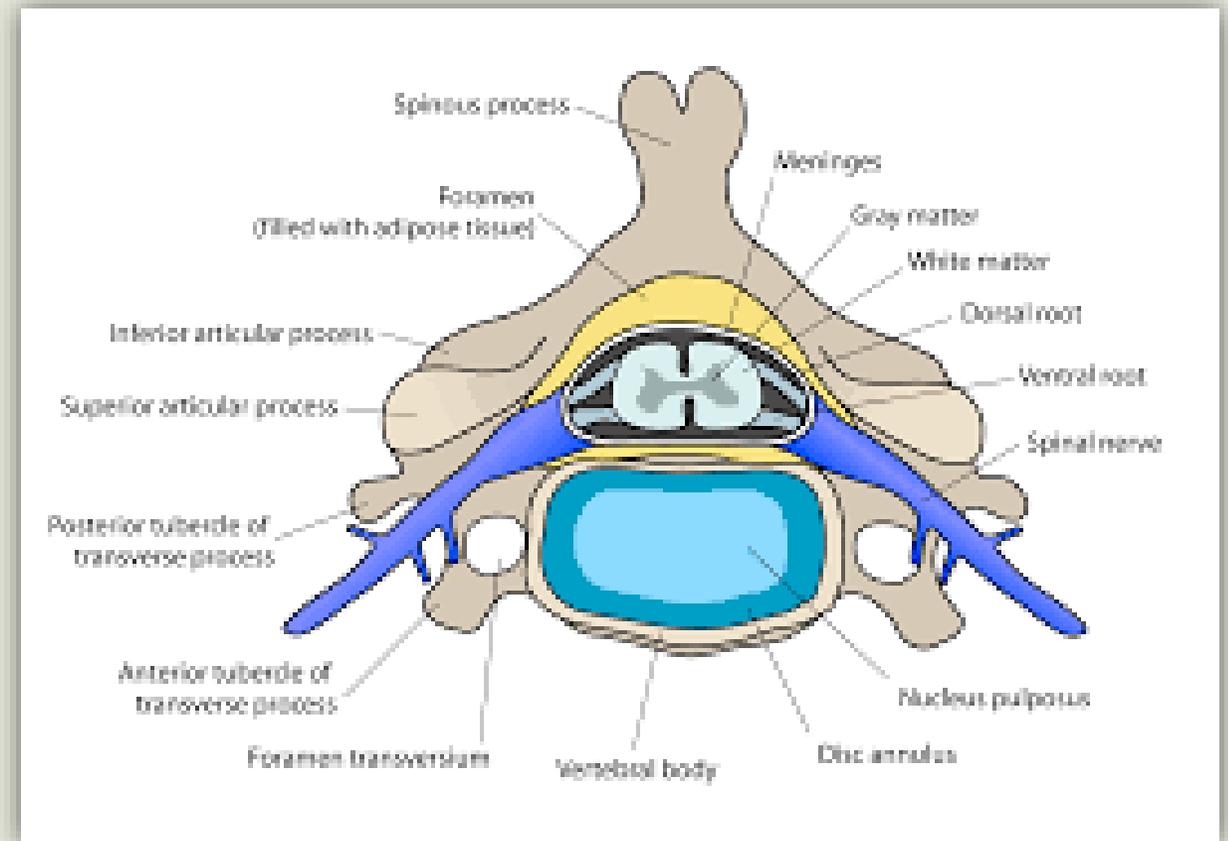
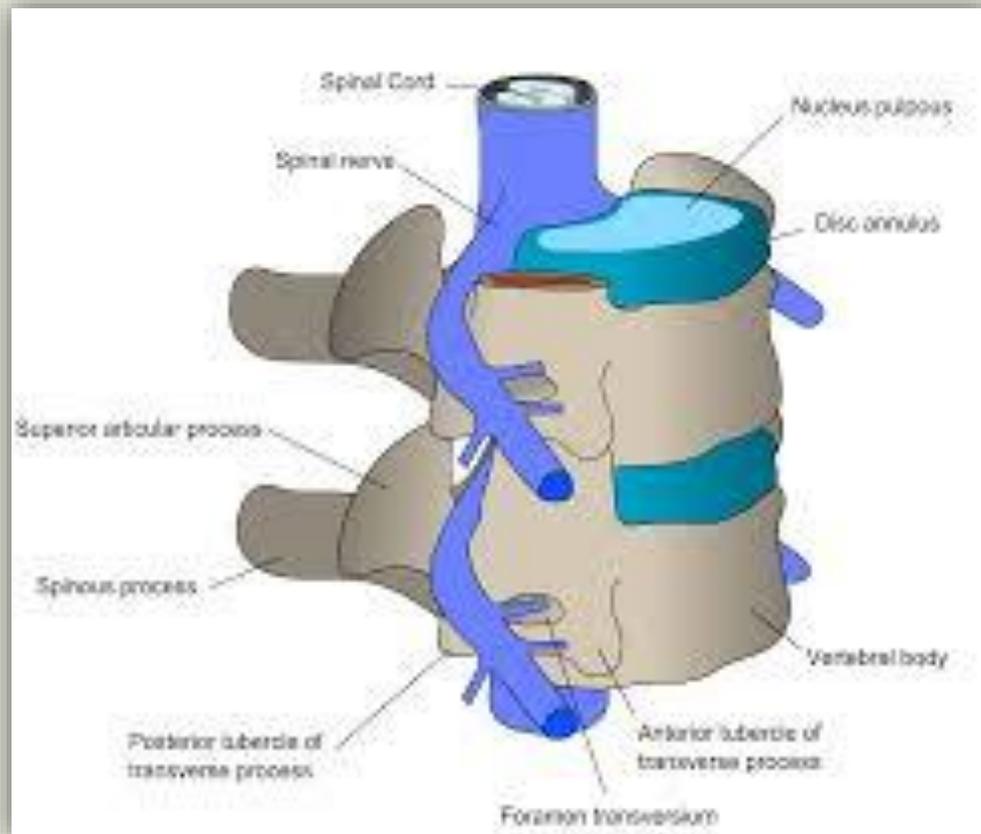
- BSEE, successful career in aerospace
- Fitness fanatic
- History of personal injury
- MSPT from UCF 2006
- Private practice



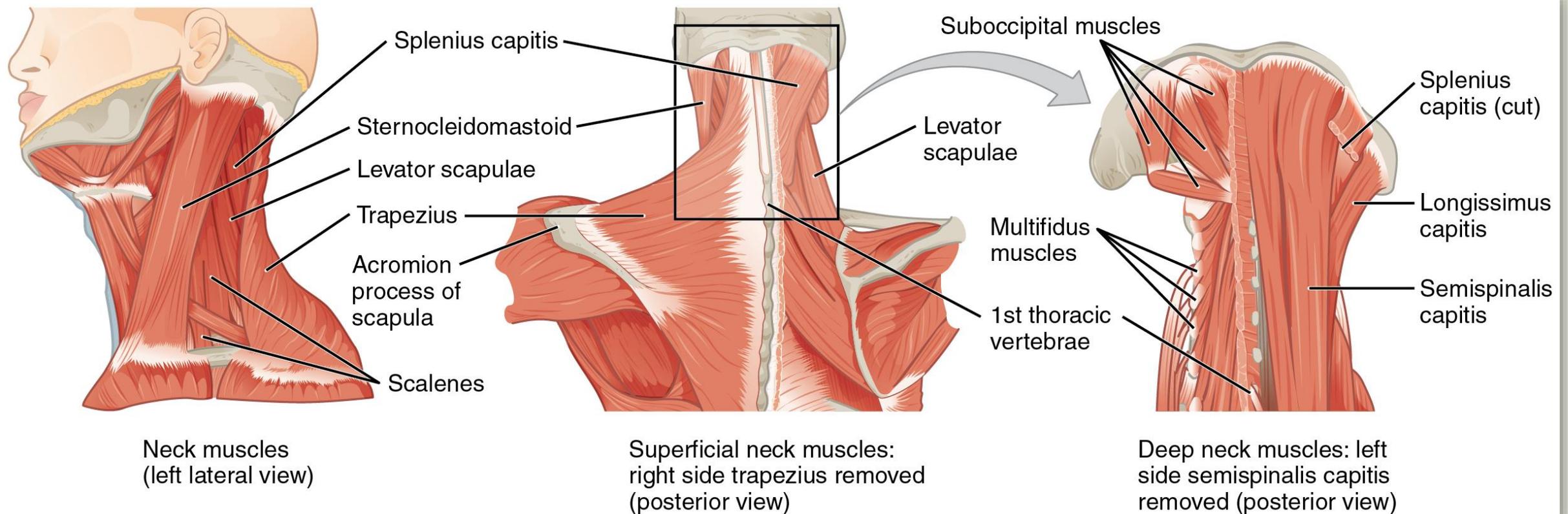
# ANATOMY OF THE SPINE



# DETAILED SPINAL ANATOMY



# MUSCLES OF THE NECK



Commons.wikimedia.org

# NECK PAIN BASICS

- According to the Advance Health Care Network<sup>1</sup>, neck pain is on the rise
  - Up to 86% of people will suffer neck pain in their lifetime
  - Estimated 41% of those will develop chronic neck pain
- Women about twice as likely as men to have neck pain
- Majority of neck pain is mechanical in nature
- In most cases neck pain usually resolves on its own in a few days to weeks
- **HOWEVER** , If neck pain is severe and/or is accompanied by these symptoms, seek medical care promptly:
  - Loss of bowel or bladder control
  - Persistent numbness/pain/tingling in arms/hands

# BASIC PRINCIPLES FOR MANAGING NECK PAIN

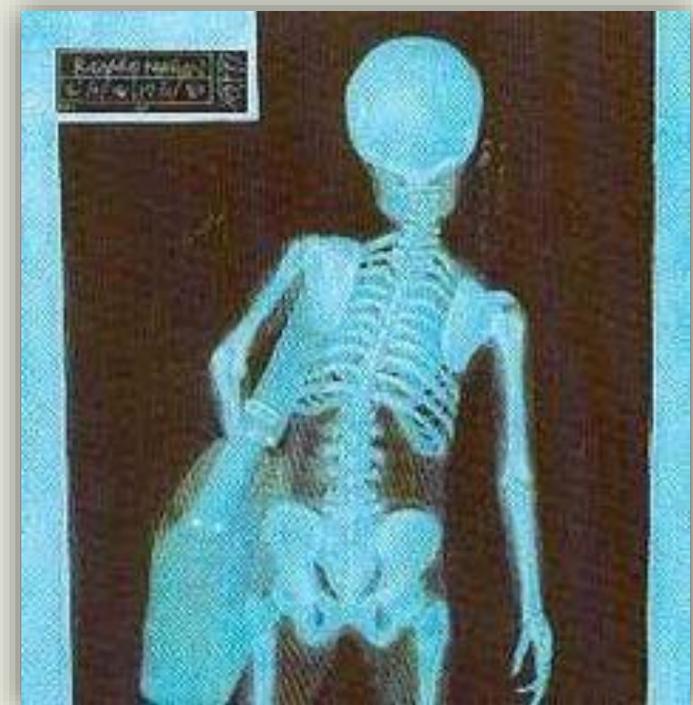
- Relative rest: take it easy but don't stop moving!
- HOT or COLD???
- Over-the-counter pain medications
- Gentle exercises as soon as tolerable
- Studies show passive mobilization effective
- Studies show neck collars not effective
- Some evidence for neck pillows



[www.tranquilitycs.com](http://www.tranquilitycs.com)

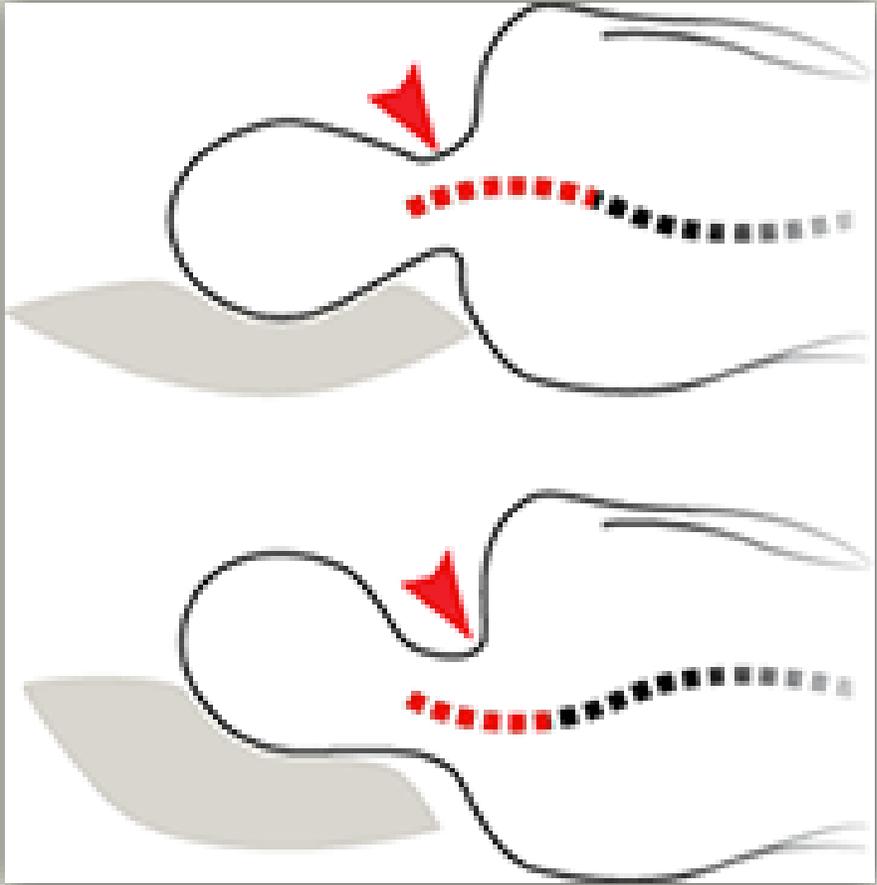
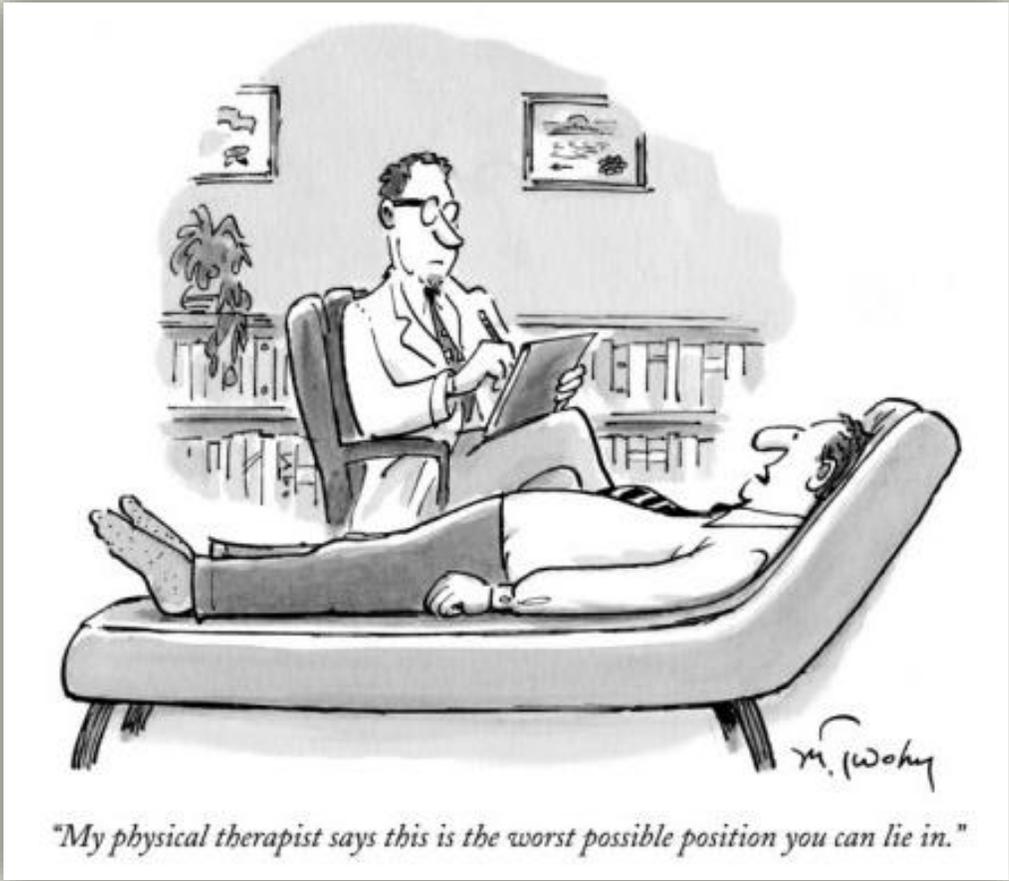
# PREVENTION OF NECK INJURIES

- Use good body mechanics when lifting and reaching
- Use good posture during work, home and leisure activities
  - Position monitor at eye level
  - Take frequent breaks from sitting
  - Avoid cradling phone against shoulder
  - Keep purses/briefcases light and keep shoulders level when carrying
  - Use right size pillow to maintain good spinal alignment for sleeping
- Keep “core” neck muscles strong and supple with regular exercise and stretching



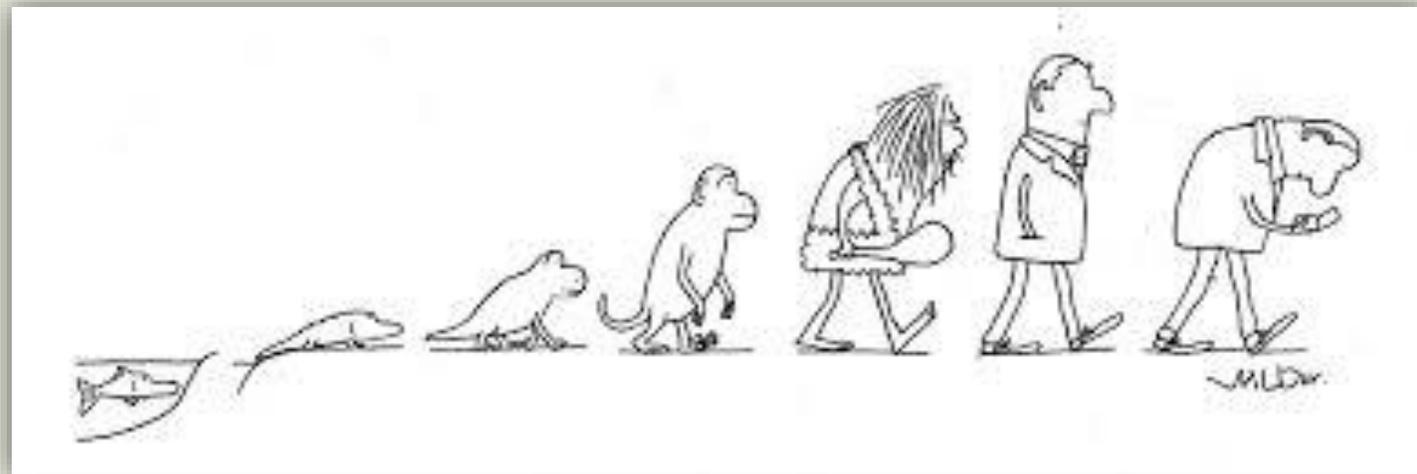
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# SLEEP POSITIONS



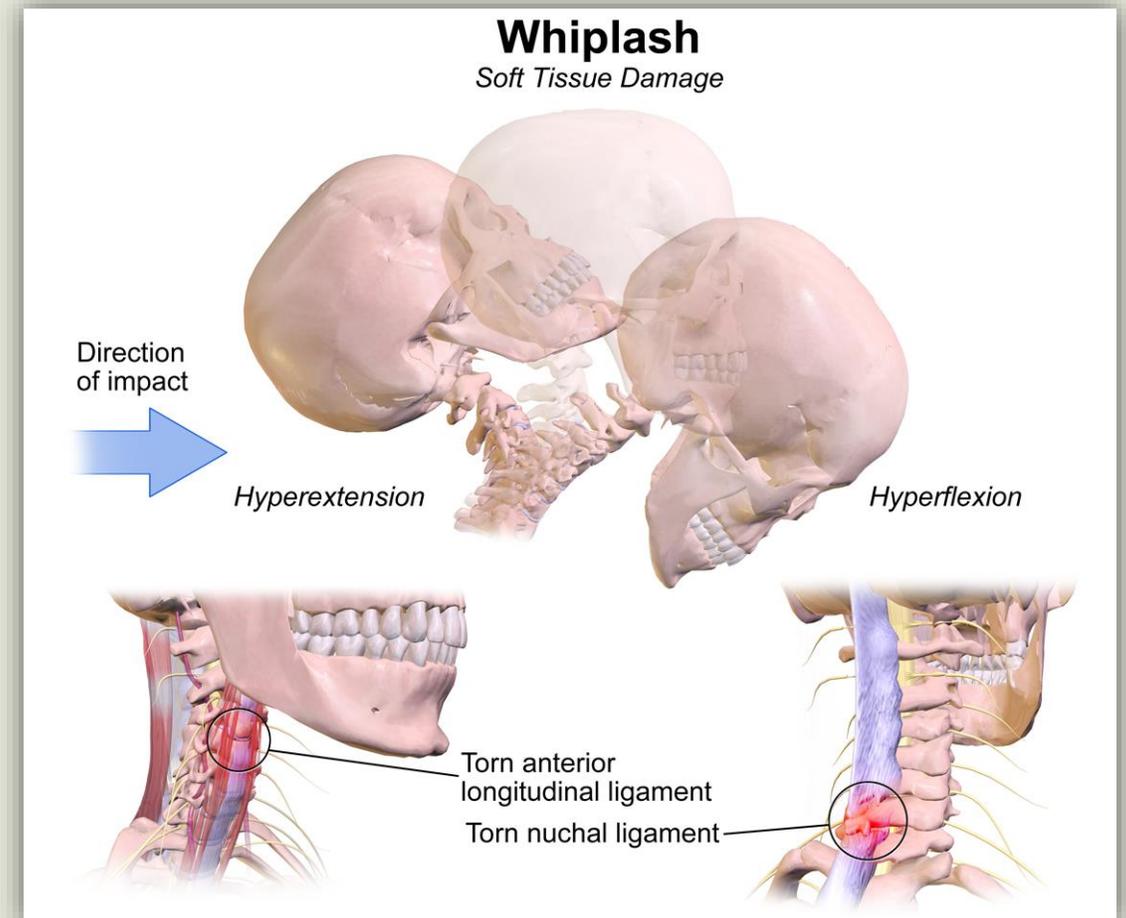
# COMMON CAUSES OF NECK PAIN

- Sprains/strains – Car accident, falls, poor posture, sleep position, stress, improper lifting, repetitive activities, weakness of deep cervical flexors
- Disk herniations – sudden movement of head, may cause referred pain into shoulder/arm
- Degeneration of spinal structures – “normal” aging
  - Arthritis/spondylosis
  - Degenerative disc disease (DDD)
  - Stenosis



# CERVICAL SPRAIN/STRAIN

- Whiplash injury most common
- Defined as a stretching injury to the neck muscles, tendons or ligaments
- Symptoms:
  - Pain that worsens with movement
  - Pain peaks day after rather than immediately
  - Stiffness, decreased range of motion
  - Muscle spasms in upper shoulder(s)

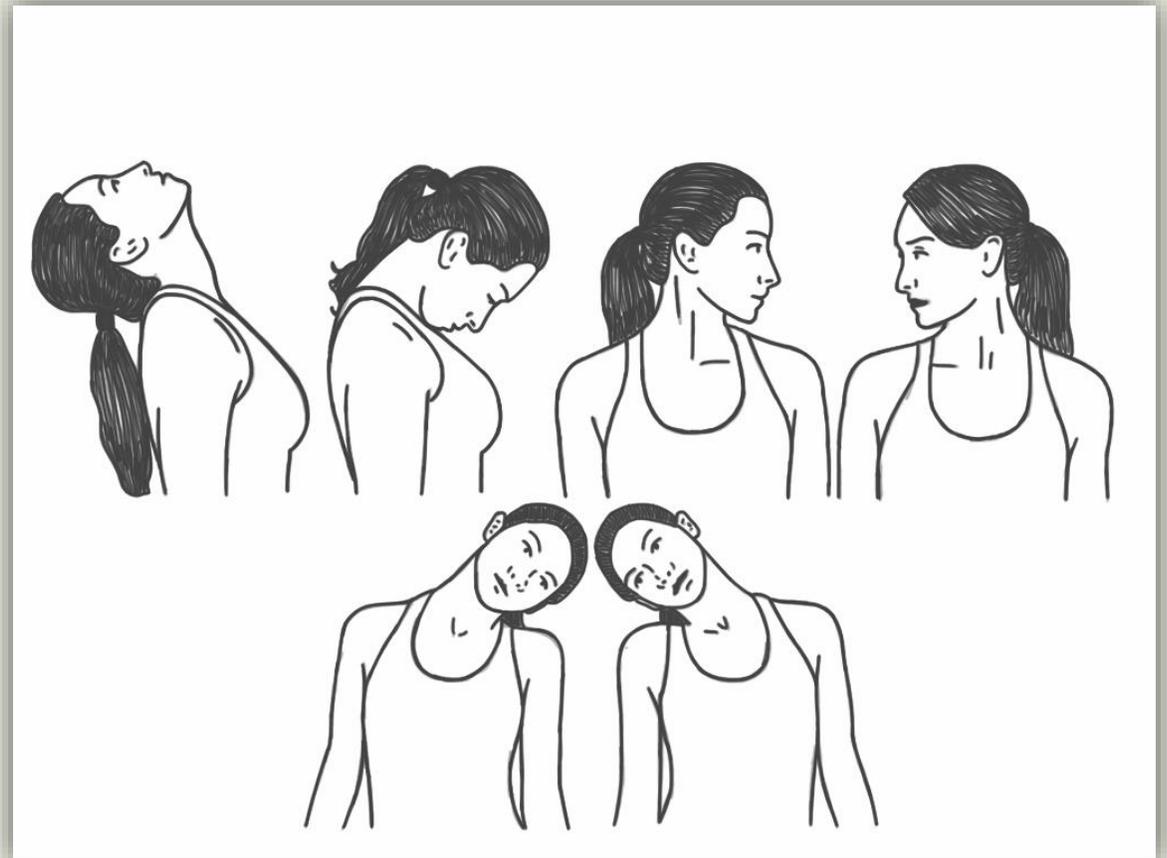


# TREATMENT FOR CERVICAL SPRAIN/STRAIN

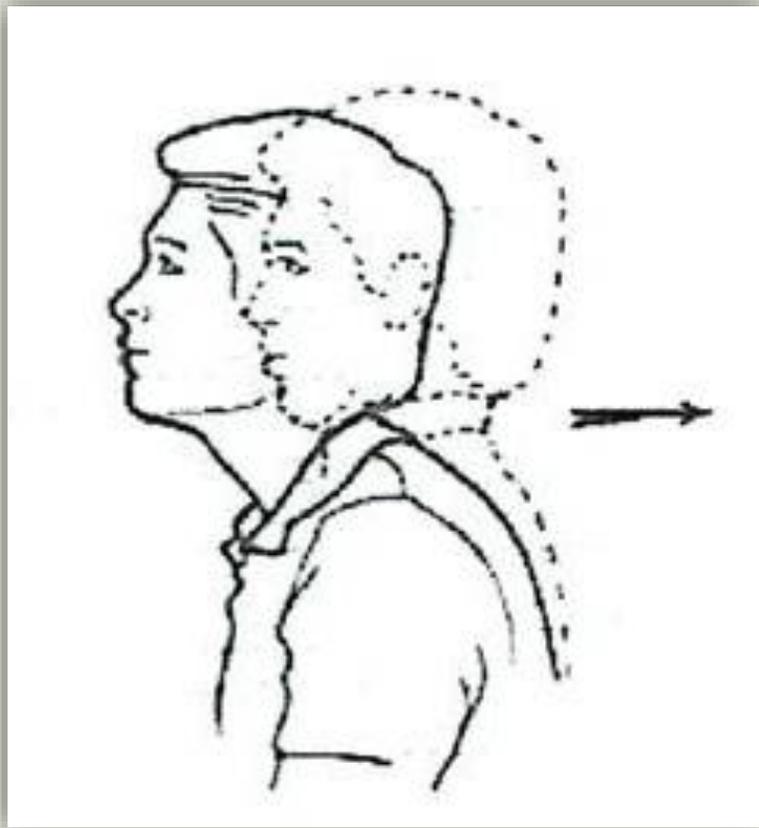
- **Avoid aggravating activities for first few days**
- **Basic Principles, especially cold pack first few days, then heat**
- **Gentle massage to improve blood flow**
- **Gentle range of motion (ROM) exercises when tolerable to improve flexibility**
- **Chin tucks to improve posture**

# NECK ROM

- Sit with feet flat on floor, good posture
- Move head slowly chin to chest/back, side to side, ear to shoulder
- Hold briefly at each end
- Perform 10 repetitions each
- BE GENTLE!!!!



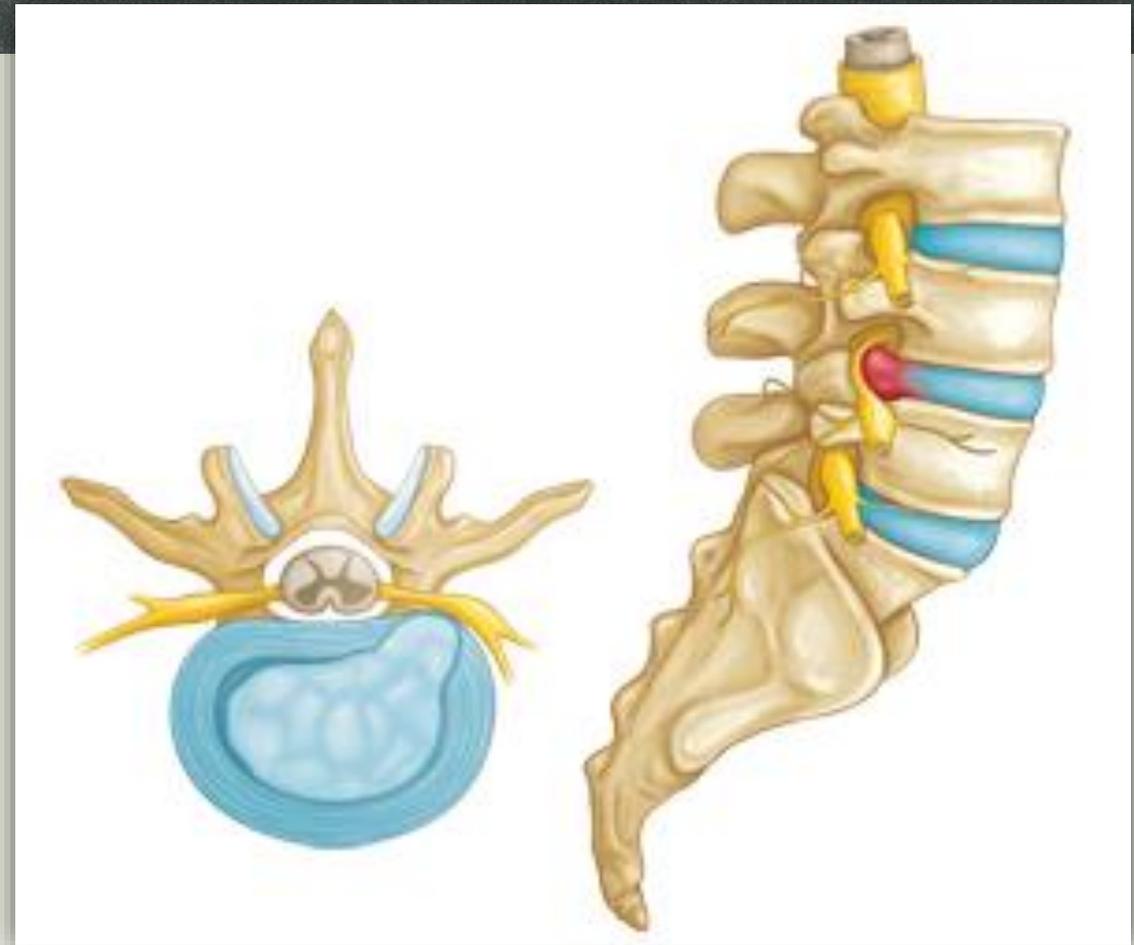
# CHIN TUCKS



- **Sit with feet flat on floor, good posture**
- **Tuck chin in towards chest keeping eyes level**
- **Hold for 5 sec, gradually increasing to 1 to 2 minutes**
- **Repeat 10 times (fewer reps for longer holds)**
- **Use moderate intensity**
- **Great for computer rest breaks!**

# DISC HERNIATIONS

- Men age 30 – 50 most likely
- Increased pain in AM
- Often causes referred symptoms down arm(s)
- Often increased pain w/sidebending
- Many are asymptomatic



<http://orthoinfo.aaos.org/topic.cfm?topic=a00534>

# TREATMENT - DISC HERNIATION

- **Basic principles**
- **Avoid prolonged positions, especially sitting at computer**
- **Avoid aggravating activities and move slowly**
- **Manual/mechanical traction**

“Before Physical Therapy I was a pain in the neck”  
~Pinched Nerve

Pinterest.com

# DEGENERATIVE CONDITIONS

- Arthritis/spondylosis - loss of cartilage, bone spurs
- Stenosis – narrowing of spinal canal puts pressure on spinal cord
- Degenerative Disc Disease – decrease in disc height



# TREATMENT – DEGENERATIVE CONDITIONS

- **Stretching and flexibility exercises**
  - Levator stretch
  - “Scap” squeezes
- **Strengthening exercises, especially deep cervical flexor muscles**
  - Supine chin tuck with head lift
- **Aerobic exercise**
- **Posture and movement education**



# LEVATOR STRETCH

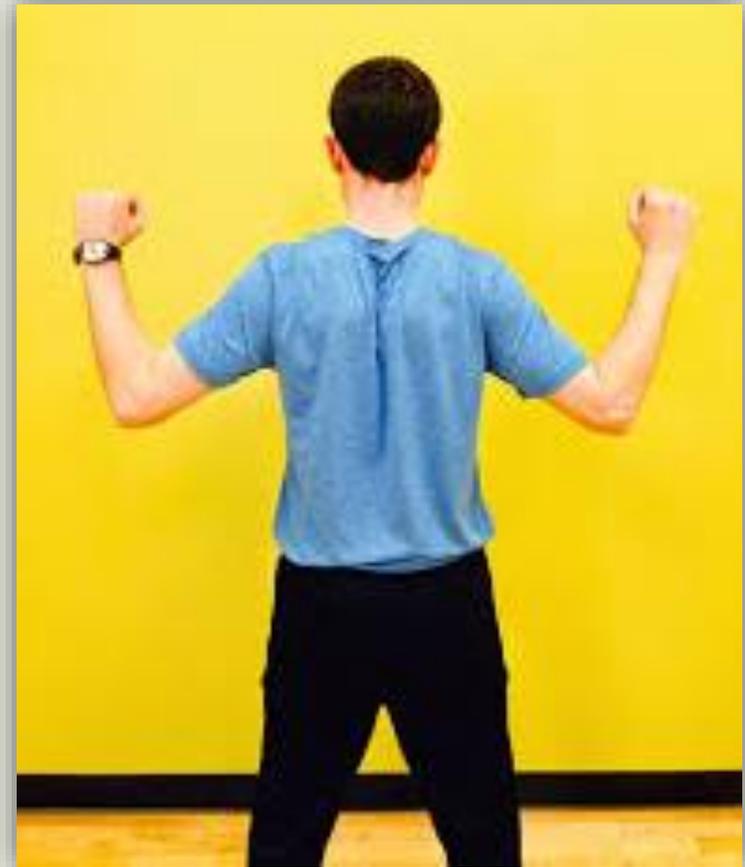
- Sit with feet flat, good posture, arm of stretching side behind back
- Turn head 45 deg and tilt head forward to look at armpit, overpressure optional
- Hold 20 - 30 seconds
- Perform 3 repetitions on each side
- **BE GENTLE!!!**



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# “SCAP” SQUEEZES

- Sit or stand with good posture
- Bend elbows and squeeze shoulder blades together and down
- “Elbows in back pockets”
- Hold 5 seconds
- Perform 1 to 2 sets of 10 with good form



[Mashpeefitness.blogpost.com](http://Mashpeefitness.blogpost.com)

# SUMMARY OF OPTIONS FOR ADDRESSING NECK PAIN

- **Self treatment**
- **Injections**
- **Surgery**
- **Physical therapy**
  - **Thorough assessment for muscle imbalances, postural contributions, root cause**
  - **Pain relief modalities (Electrical Acupuncture, Hot/Cold packs, Kinesiotape)**
  - **Manual therapy (Soft/deep tissue mobilization, strain-counterstrain, joint mobs)**
  - **Supervised therapeutic exercise and neuromuscular re-education**
  - **Patient education**