BRIGHAM HEALTH

BRIGHAM AND WOMEN'S HOSPITAL

Those Headaches May be a Pain in the Neck

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Mass General Brigham

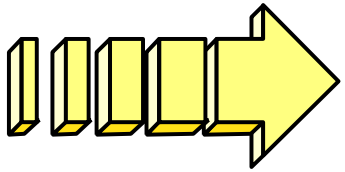
75% of people living with migraine disease report neck pain

Relieving neck pain is an important part of headache management

Objectives

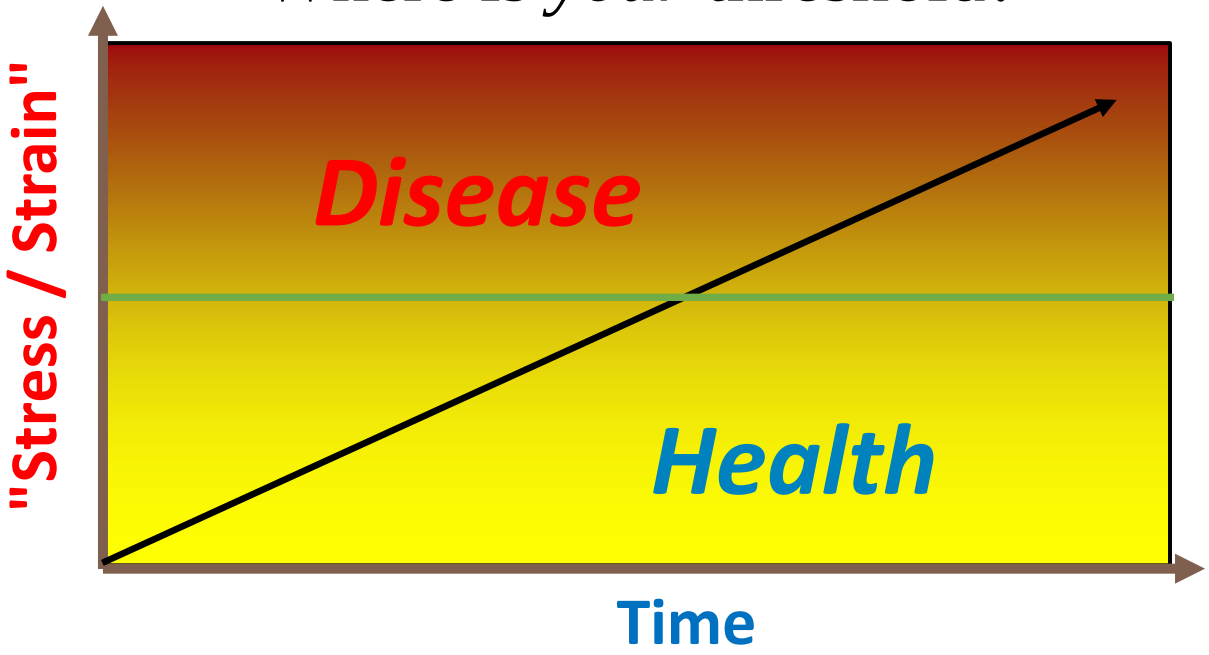
- Understand some of the cervicogenic contributions and to headaches
- Understand trigger points, self assessment, self care and partner care

- Increased Stress / Strain
- Decreased Threshold



Disease or Injury

Where is *your* threshold?



Strain Tolerance Threshold

Strain Exceeds the Capacity to Adapt and Heal

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Causes

- Posture/Ergonomics
  - Repetitive strain
- “Stress”
- Acute injury
- Lifestyle
- Migraine attack

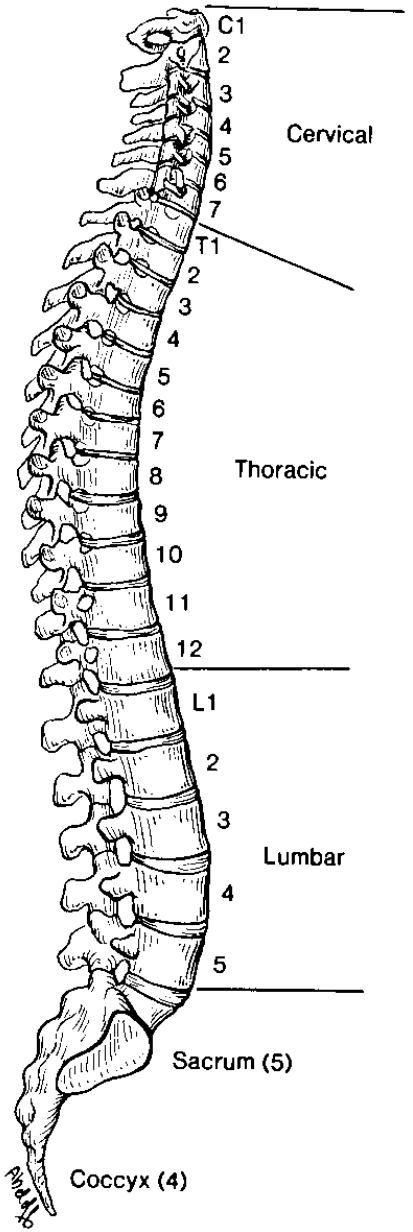
Self-Care Remedies

- Mindfulness stress reduction
- Posture correction
- Timely breaks
- Fitness / movement
- Sleep
- Massage / stretching
- Nutrition

The Anatomy of the Problem

The Spinal Column

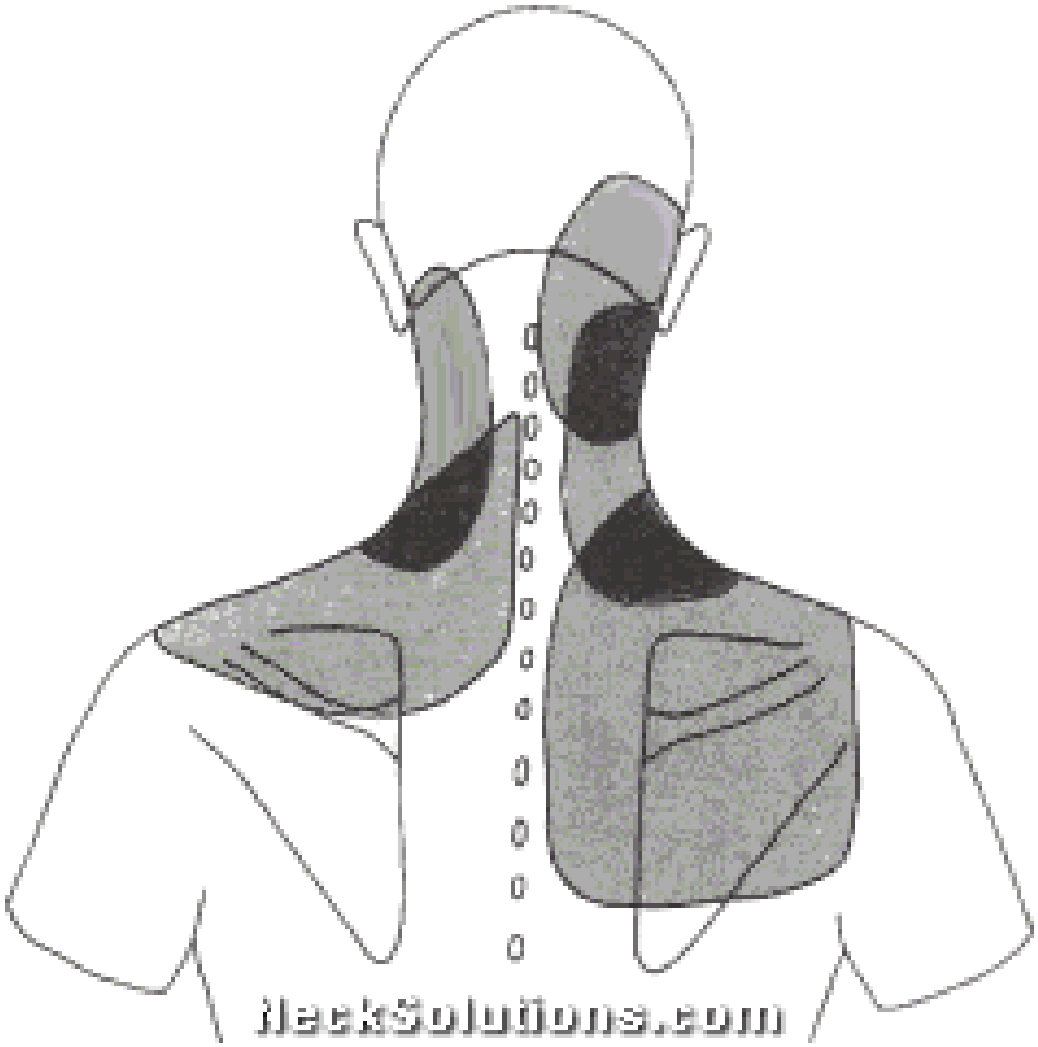
- Four Regions
  - Cervical
  - Thoracic
  - Lumbar
  - Sacral
- Four Curves
  - Cervical and Lumbar Lordosis
  - Thoracic and Sacral Kyphosis



Anatomy of the Cervical Spine

Effects of spinal bending

Facet Pain Patterns



From: Dwyer A, April C, Bogduk N:
Cervical zygapophyseal joint pain patterns:
A study in normal volunteers, Spine 15:453, 1990

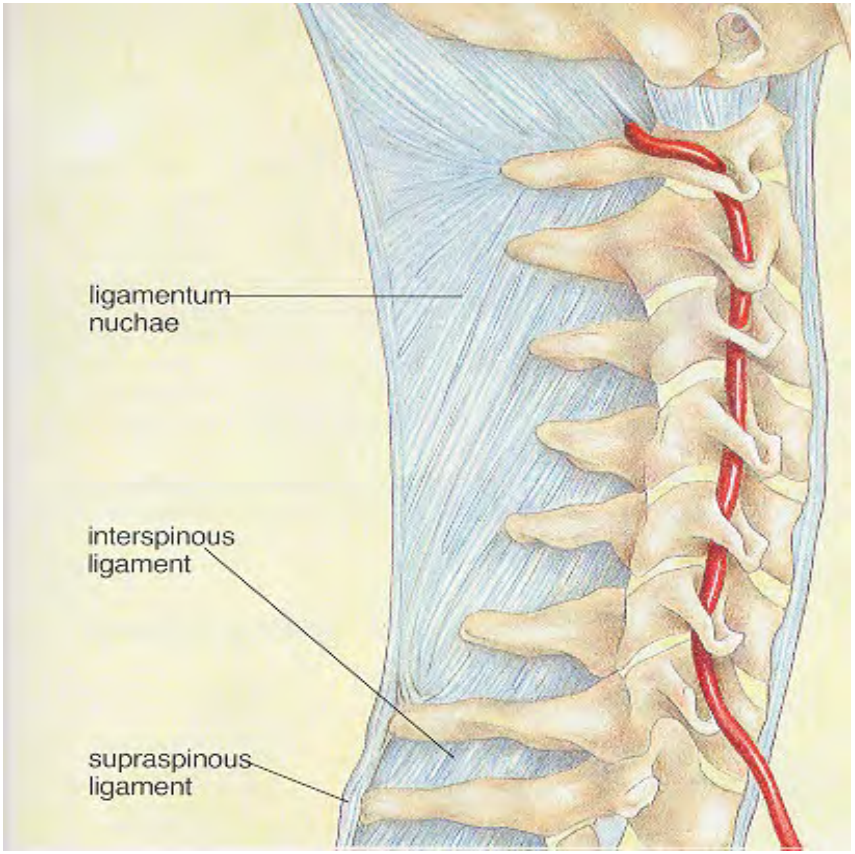
Common Causes Facet Irritation and Pain

- Postural strain
  - Habitual
  - Occupational
  - Sleeping
- Trauma
  - Micro / macro
- Inflammation
- Arthritis

Connective Tissues

Tying Everything Together

- Overstretch - Sprain
- Underuse - Contracture



Burning / Aching Pain

Myofascial Cervical-Cranial Pain

Introduction to Trigger Points

Myofascial Trigger Points

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What are they?

- Tender points / bands
- Refer pain into predictable areas
- Cause tense, stiff muscles
- Elicit a twitch or jump response when stimulated

Treatment

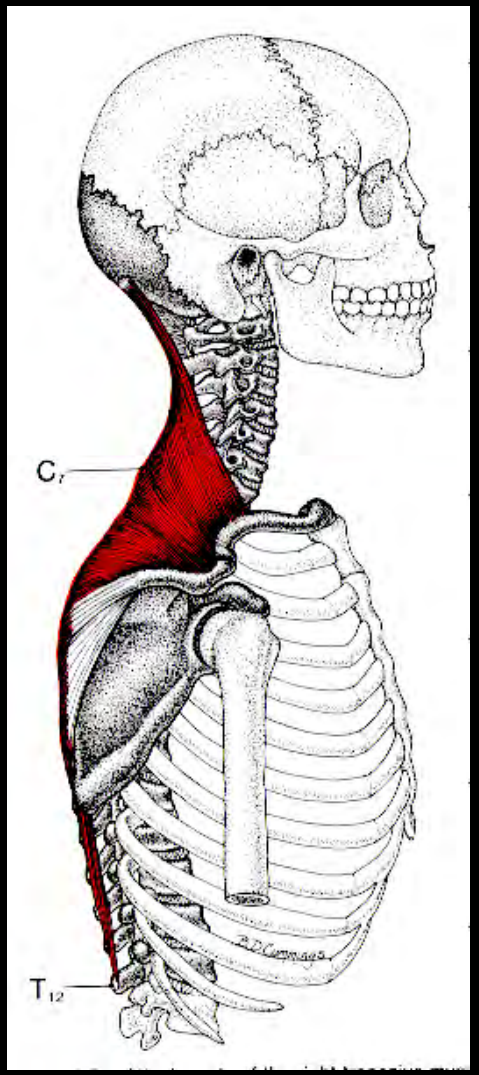
- Ice / Heat
- Massage / TPT
- Stretching
- Compress and stretch
- Injections / needling

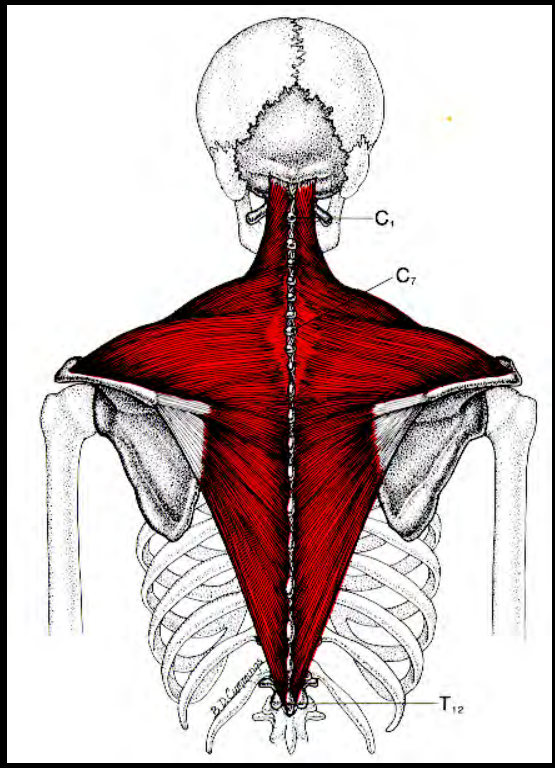
- Strain Reduction

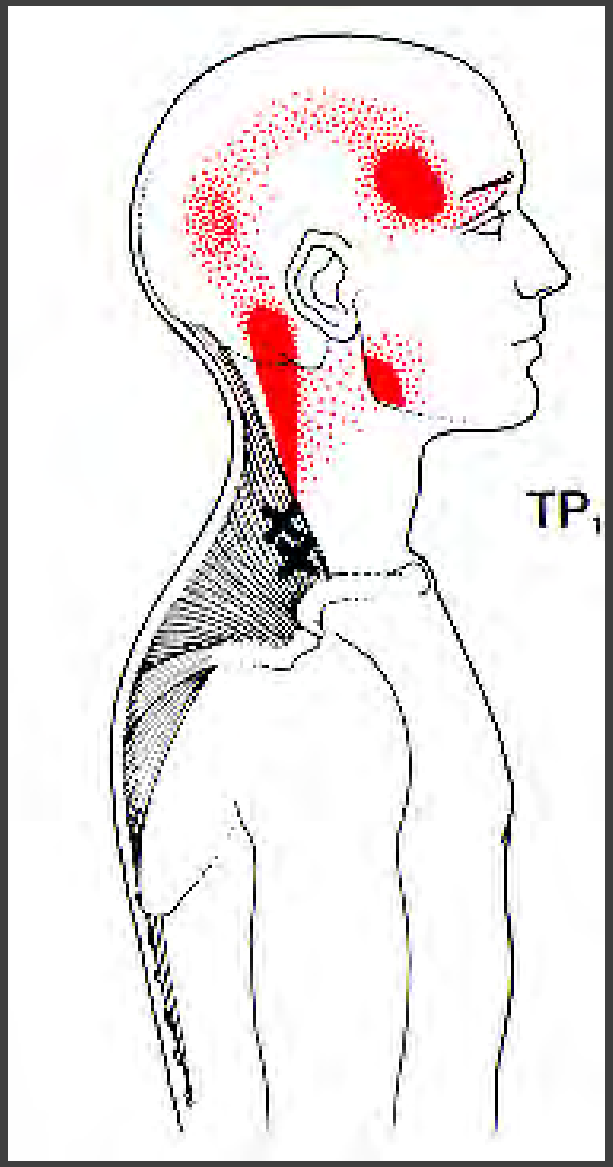
Common Muscles that Cause Neck, Upper Back and Head Pain

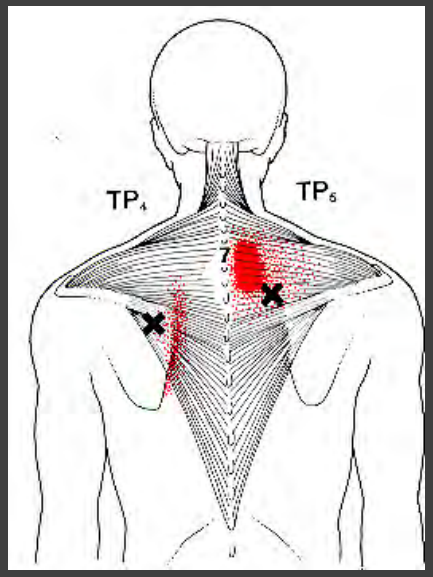
- Trapezius
- Suboccipital
- Sternocleidomastoid
- Paraoral muscles

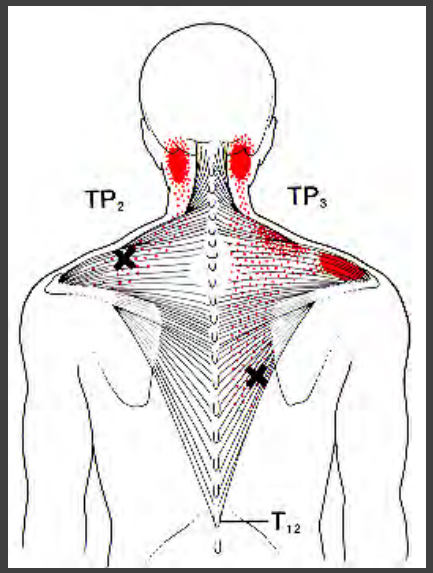
Trapezius Muscle











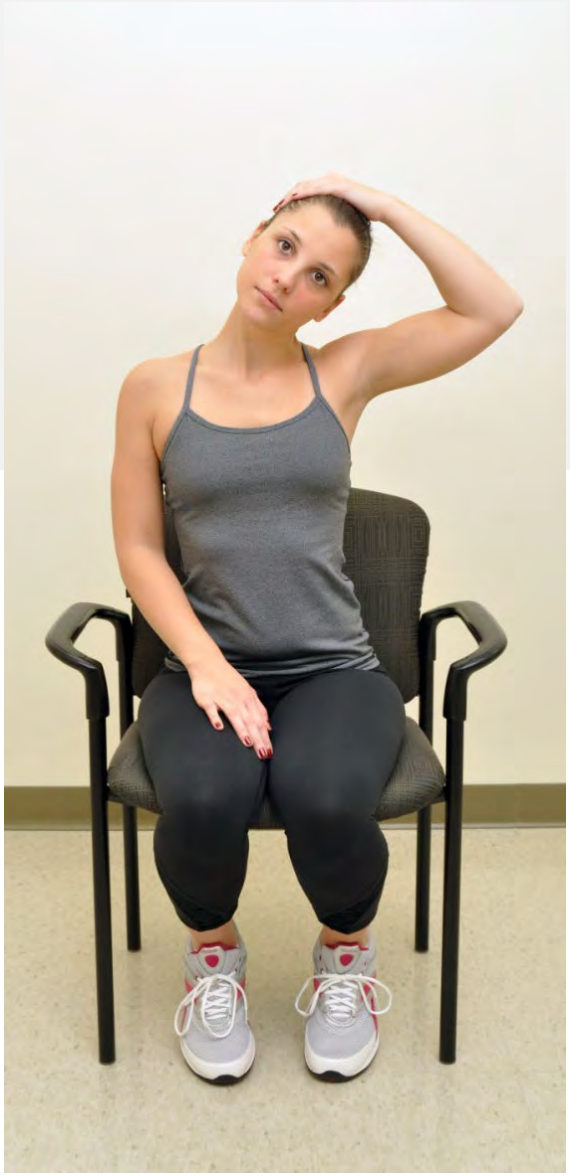
Trapezius Muscle

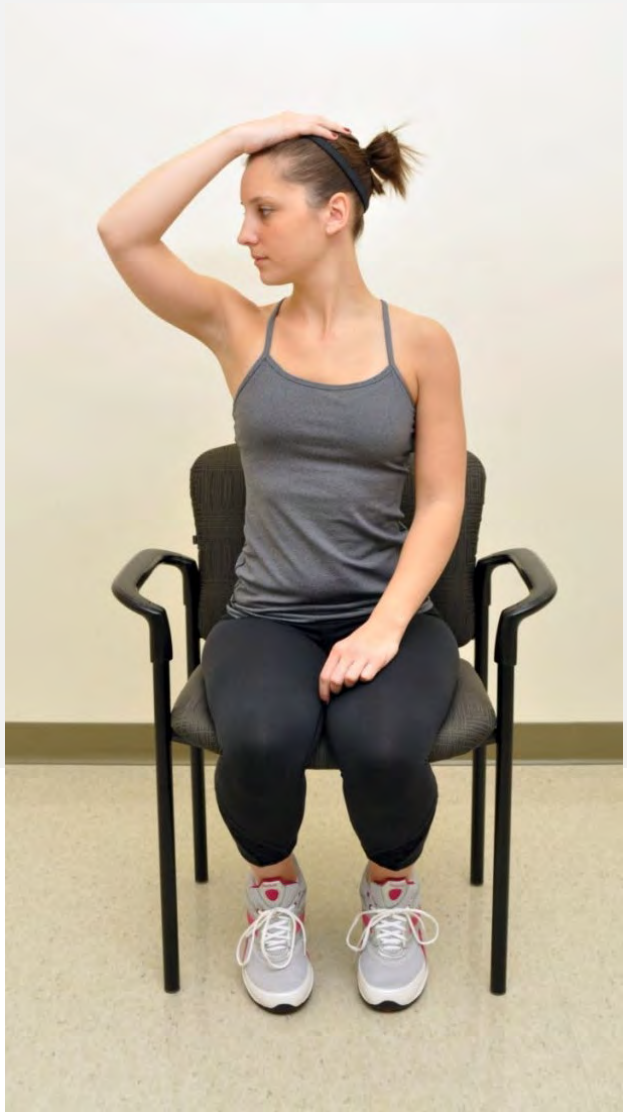
Referred Pain

Causes of Trapezius Pain

- Shoulder disorders
- Head tilt
- Forward head carriage
- Rounded shoulders
- Cool breezes
- Poor pillow support
- Muscle imbalances

Trapezius Muscle *Stretches*

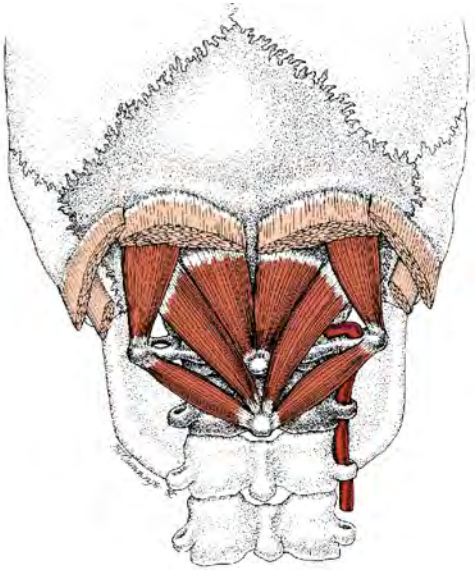


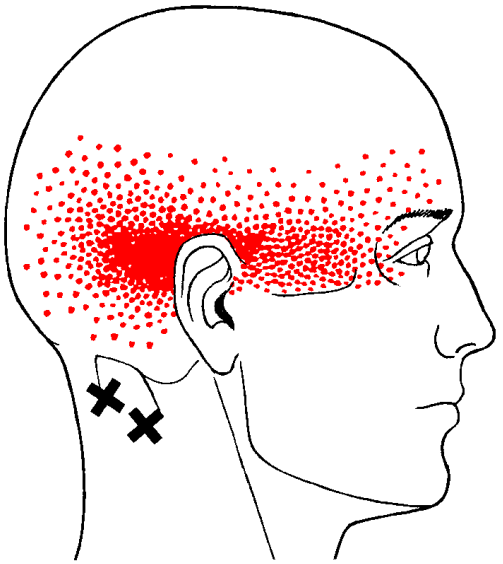


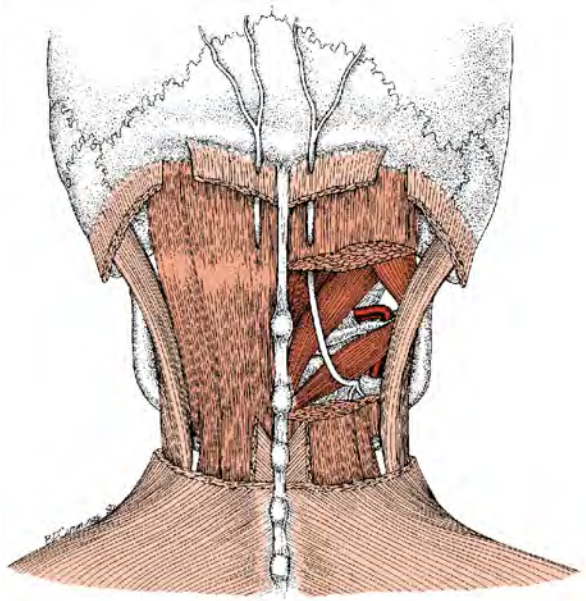
Upper Trapezius *Stretches*

Self Trigger Point Therapy

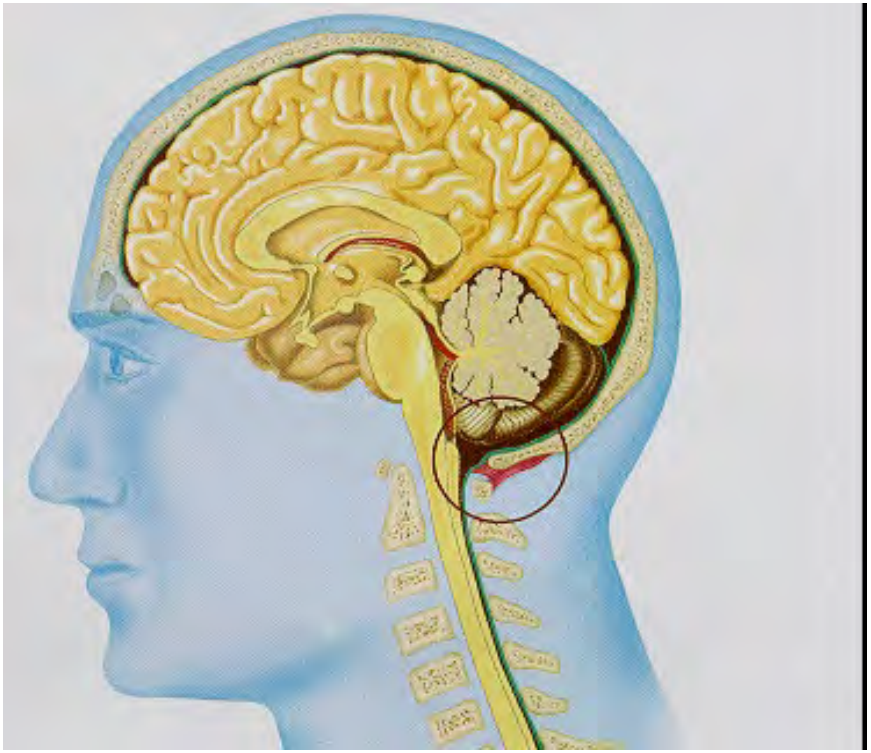
Suboccipital Muscles

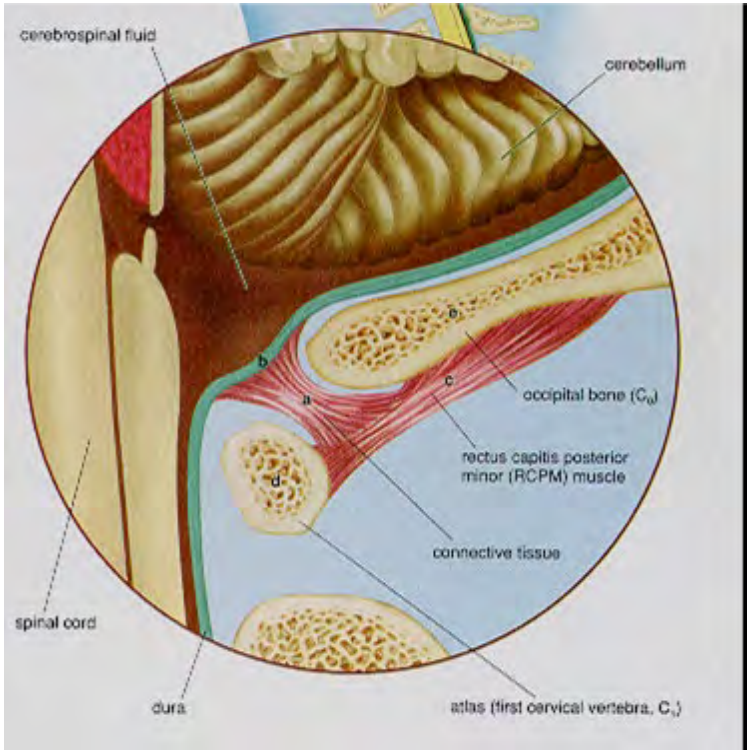




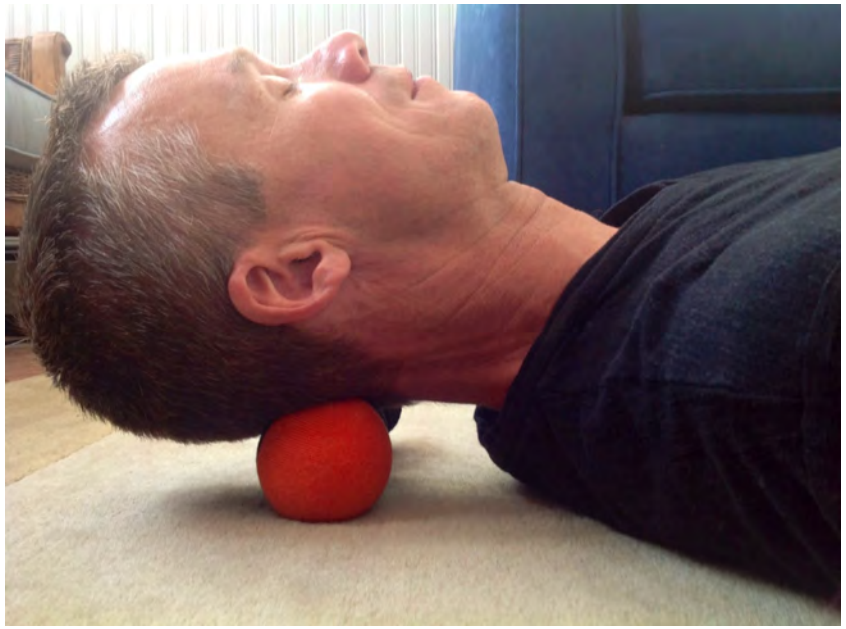


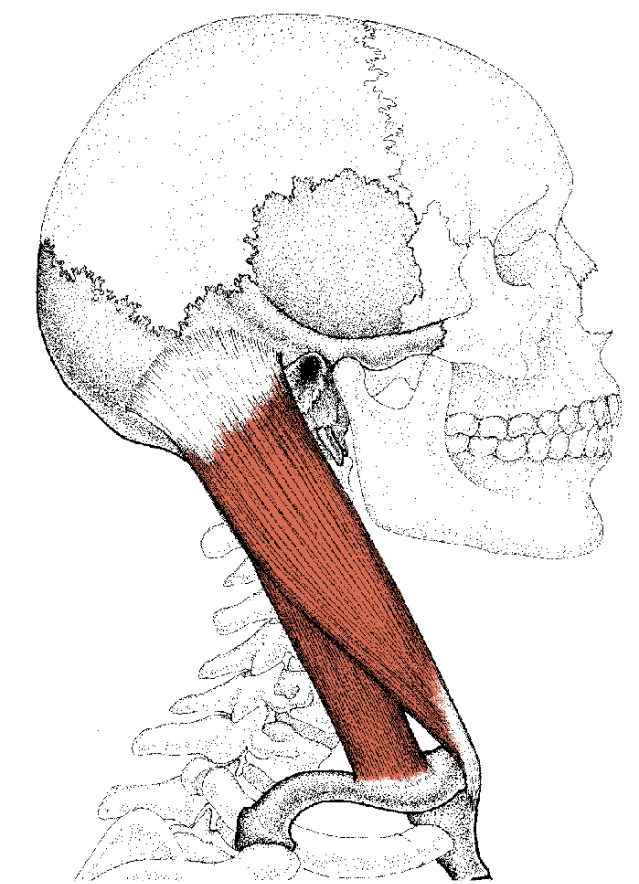
An Anatomical Connection

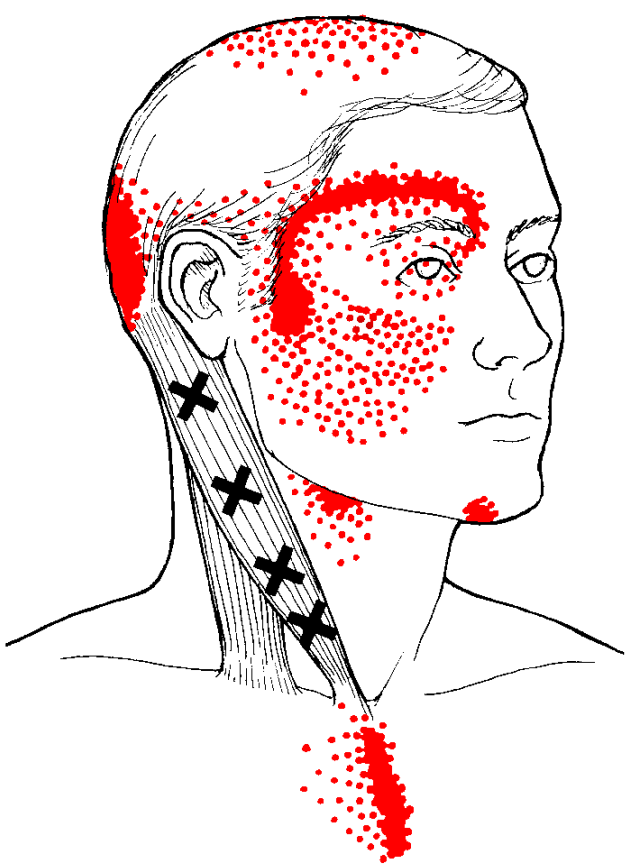


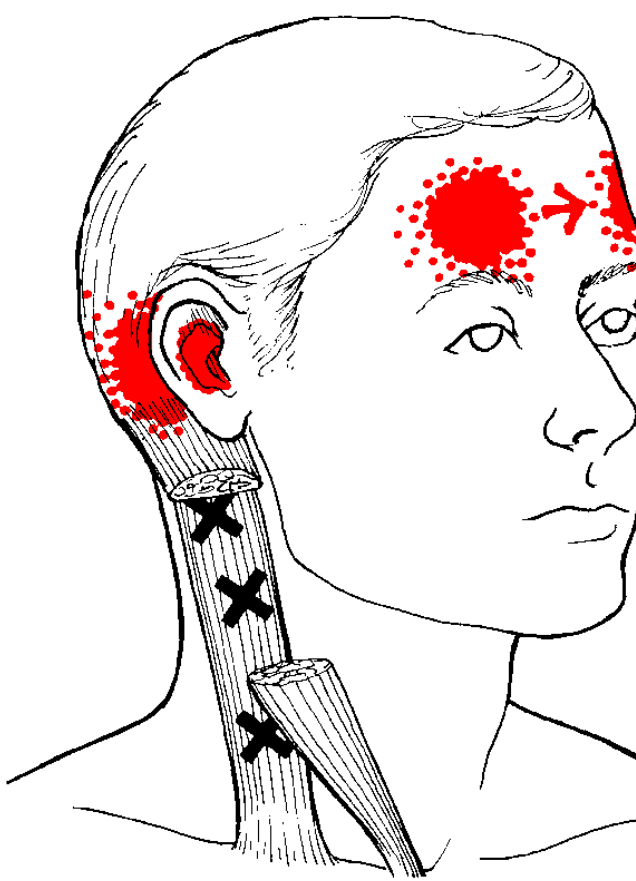


Self Trigger point therapy









The Sternocleidomastoid

SCM Self Compress and Stretch

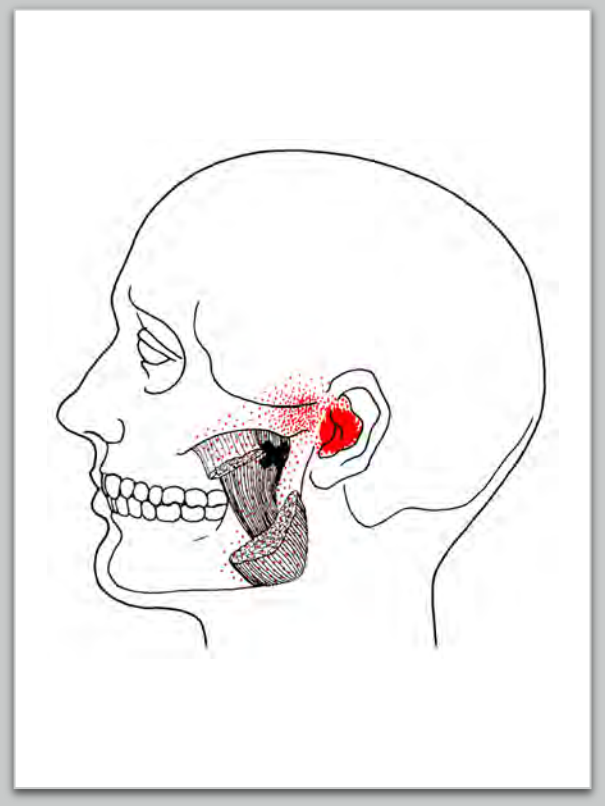
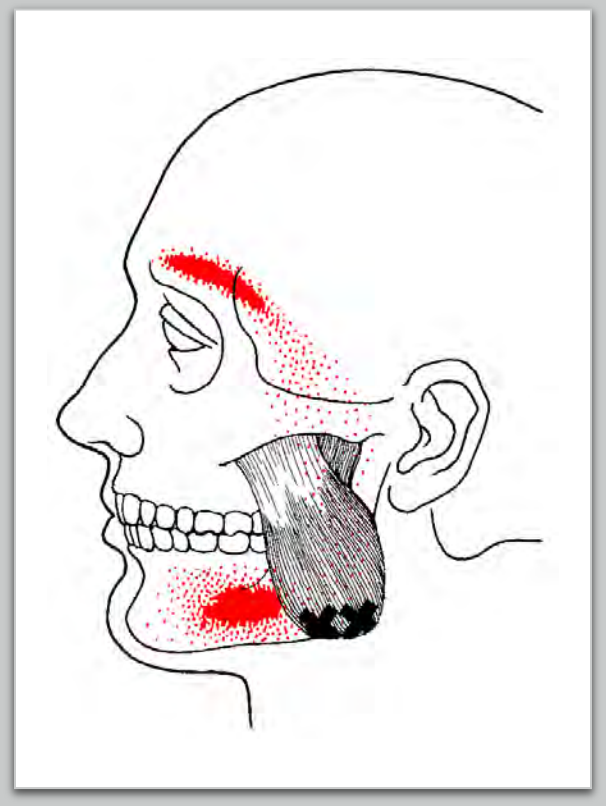
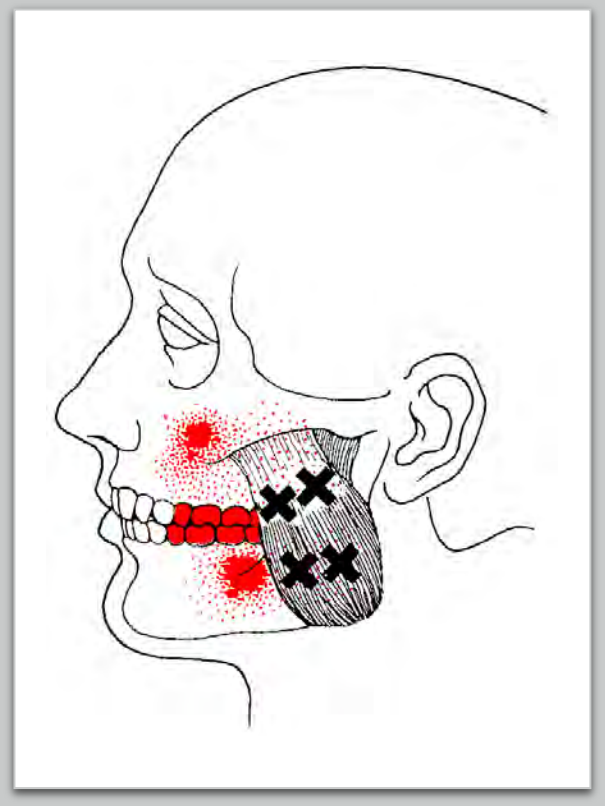
SCM Stretches

Some Causes of Suboccipital and SCM TPs

- TMD / bruxism
- Bifocal / progressive glasses
- Forward head carriage
- Weak deep neck flexors
- Imbalance of strength and flexibility

Myofascial Craniofacial Pain

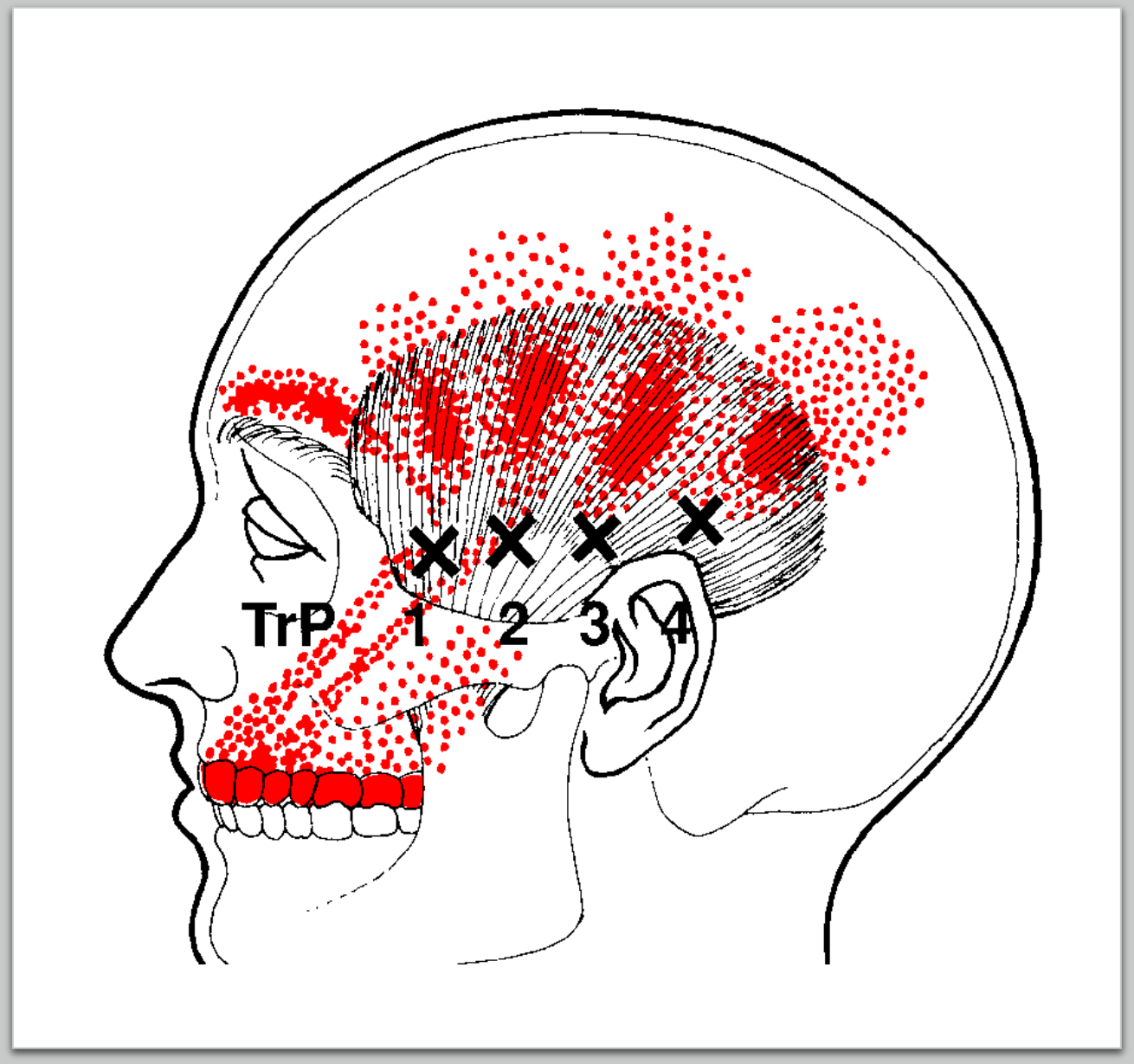
The Paraoral Muscles

Masseter Muscle

Masseter Compress and Stretch

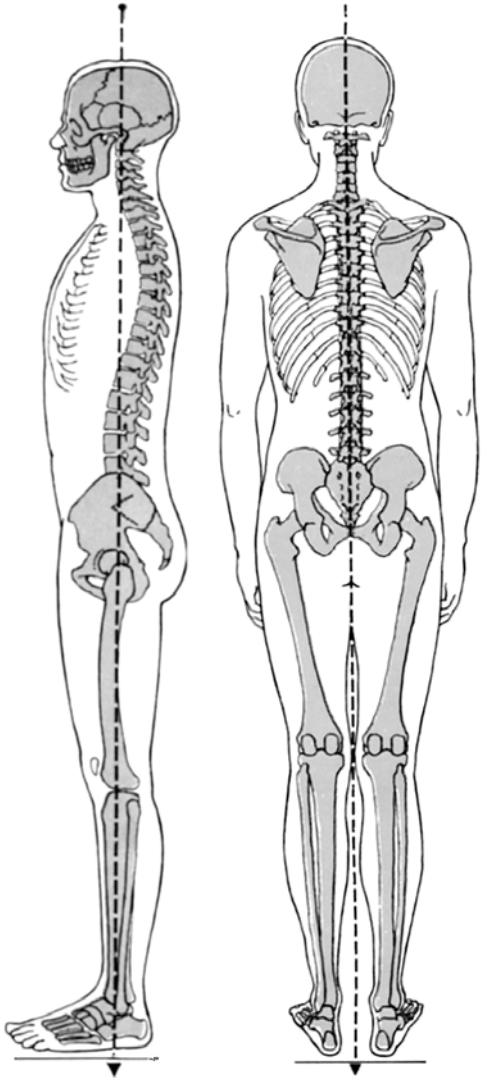
Temporalis Muscle



Temporalis Compress and Stretch

Posture

The Foundation of Spinal Health



Tight Posterior Cervical Soft Tissues

Weak Deep Neck Muscles

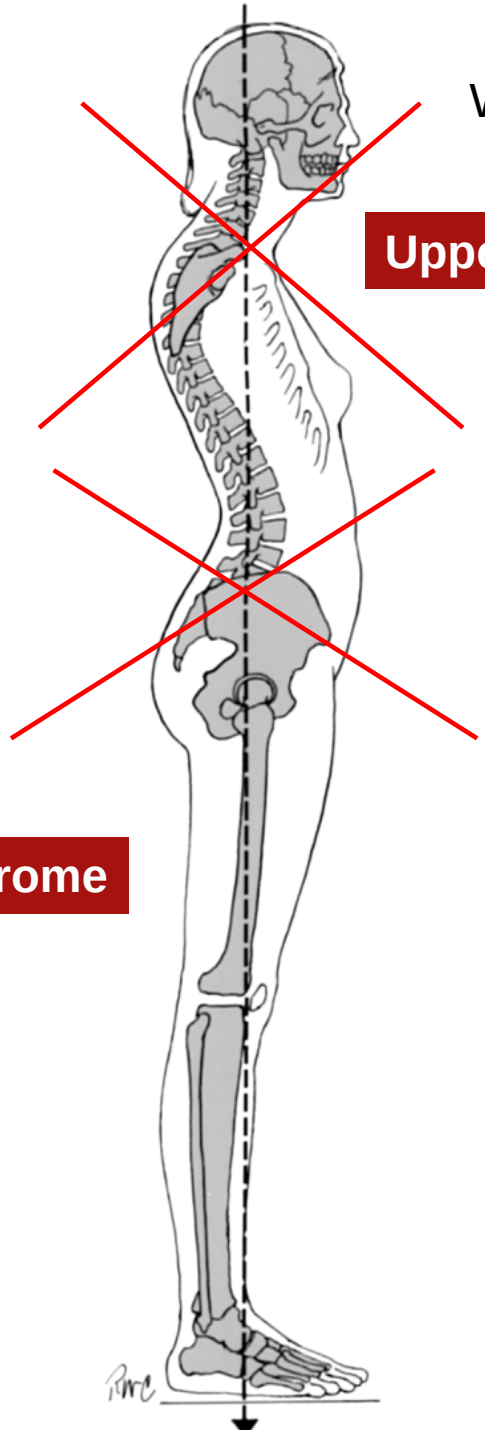
Upper Cross Syndrome

Weak Parascapular Muscles

Tight:
Thoracolumbar,
Quadratus Lumborum Muscles

Weak Gluteal Muscles

Lower Cross Syndrome



Tight Pectoralis Muscles

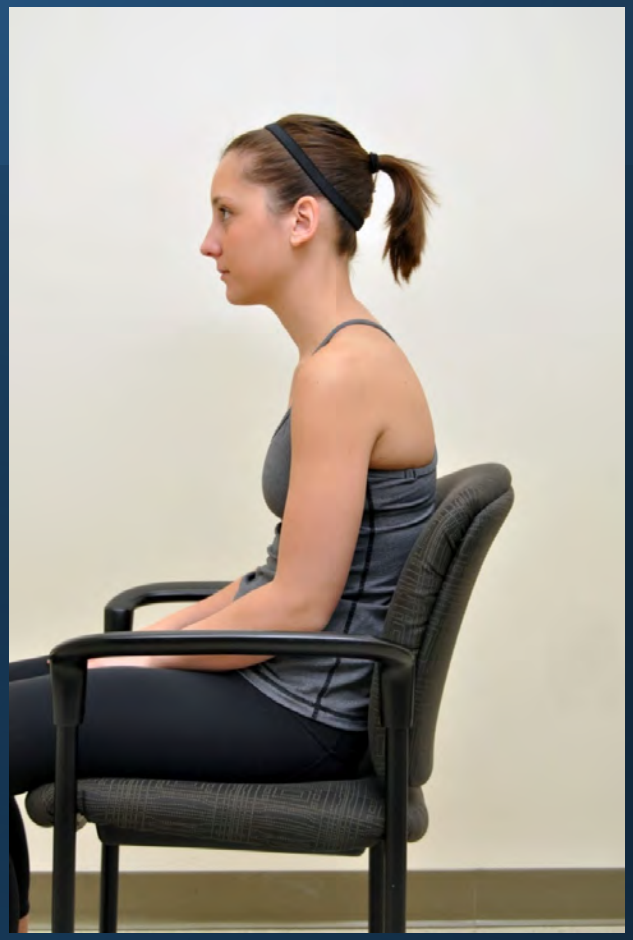
Weak Abdominal Muscles

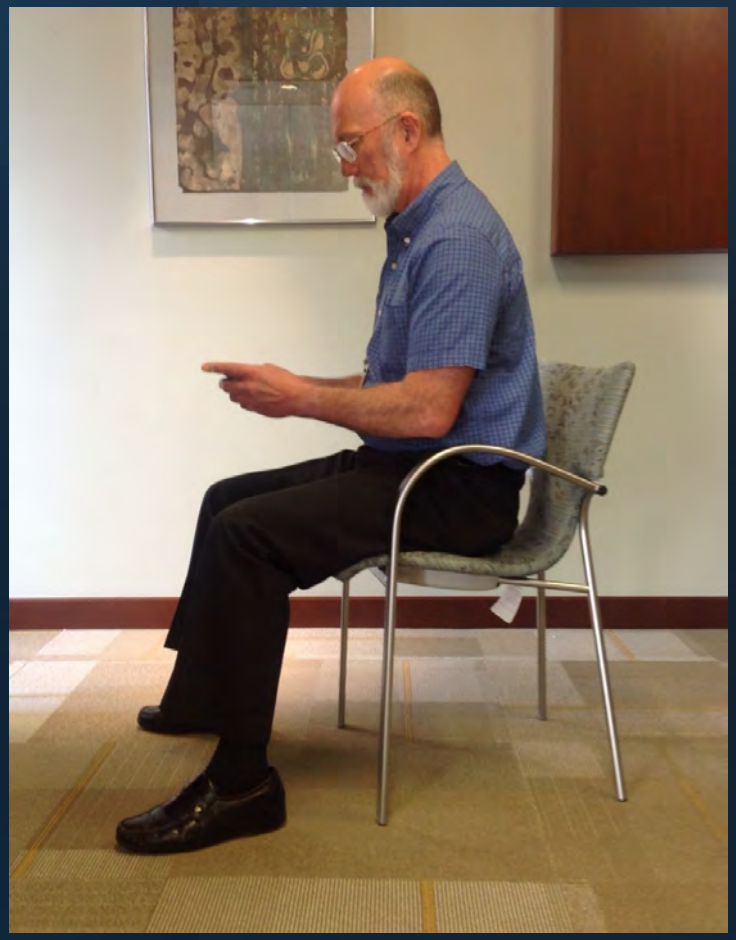
Tight:
Hip Flexor Muscles
Piriformis

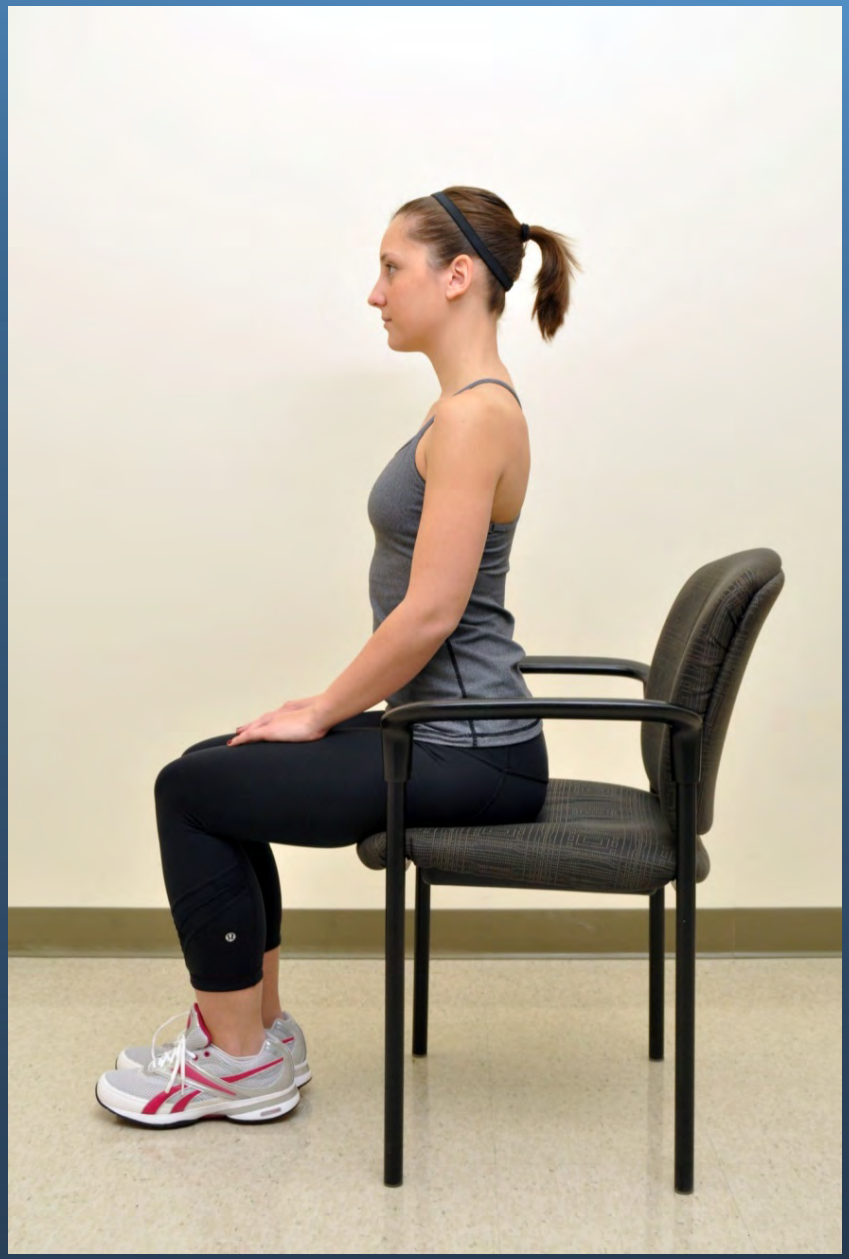
Self Test

- Rotate and side bend the neck from side to side
- Try while sitting erect
- Try while sitting slouched

Common Seated Postural Faults







McKenzie
Roll

Foam
Wedge

Back
Hugger

Support your NECK while sleeping!

- Jackson Cervipillo
- McKenzie Cervical Roll

Key Postural Exercises

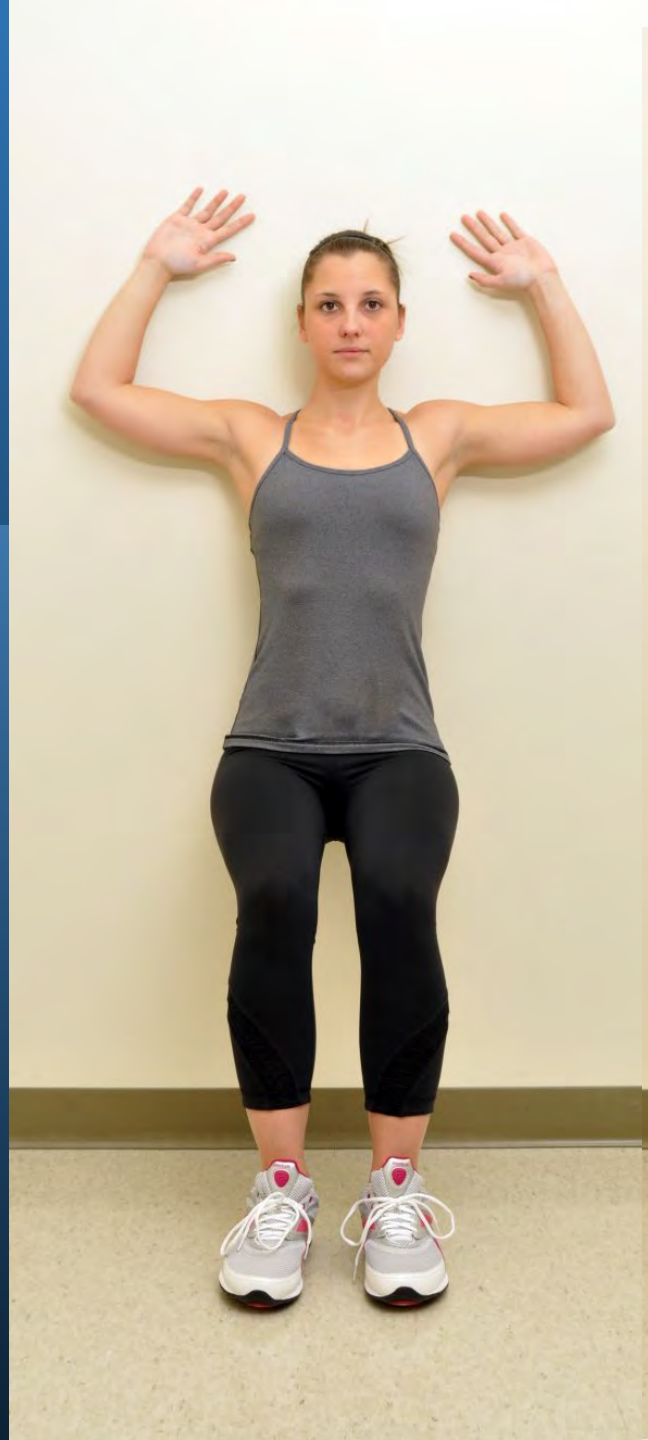
Position in life is everything

Postural Relief Position

Habits are hard to change....repetition is key!

10 seconds every hour!!

Wall Angels



Thank You

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