

Spinal Stenosis

Dr. John Bergman

What is Spinal Stenosis?

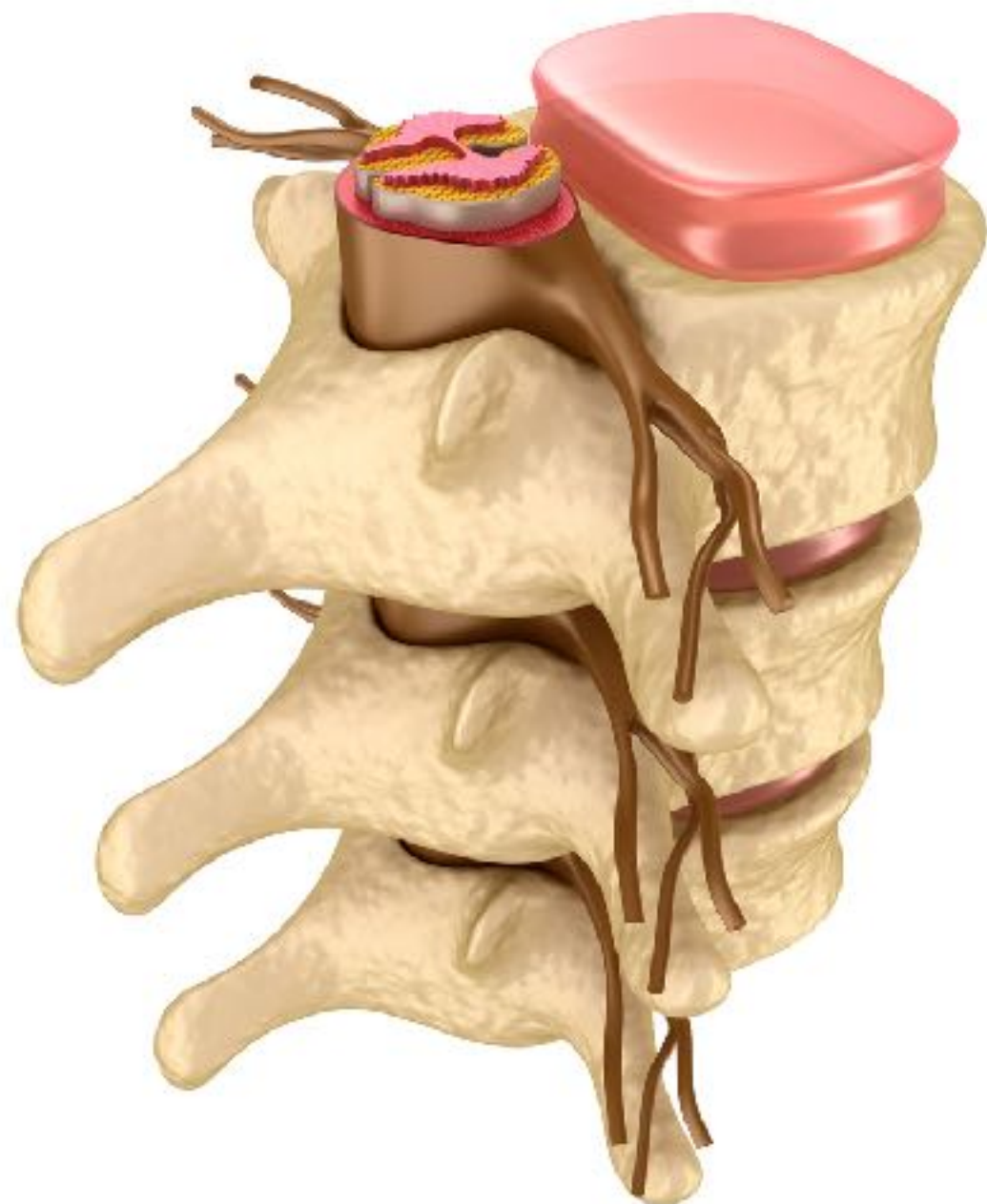
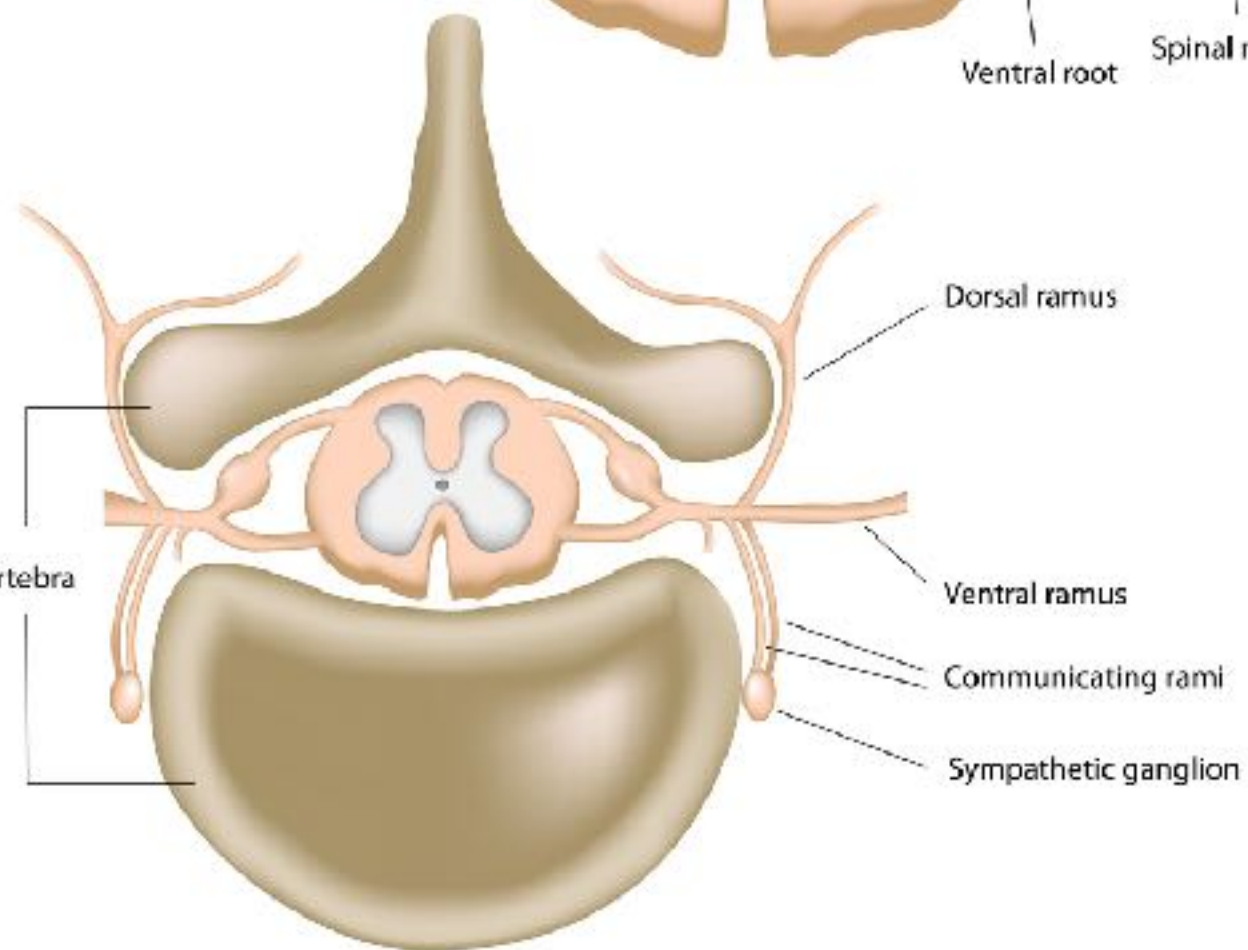
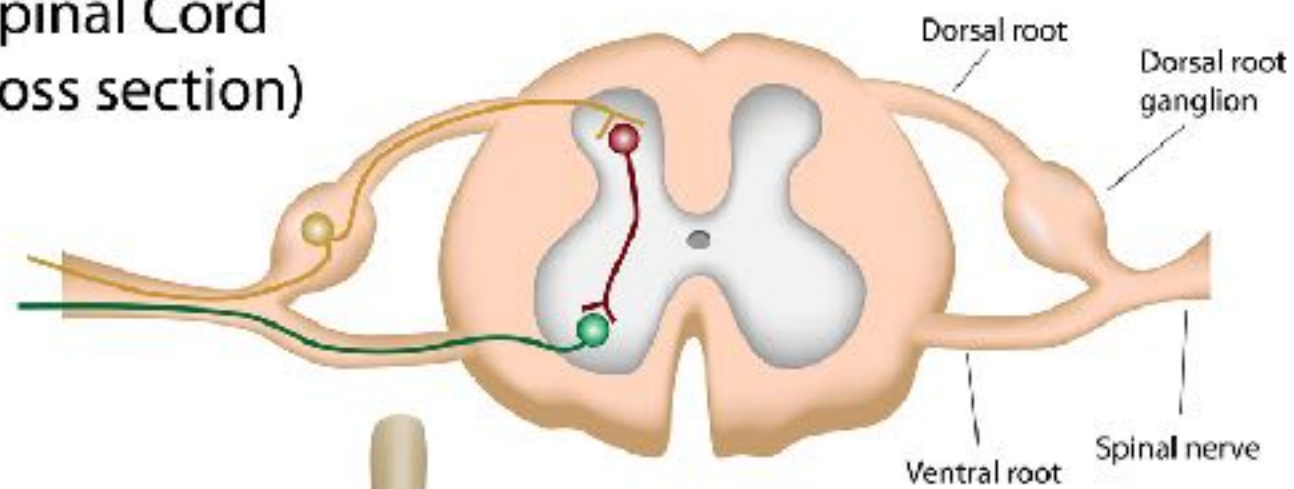
- A narrowing of the spinal canal
- Commonly occurs in the neck and low back
- Can put pressure on the spinal cord and nerves

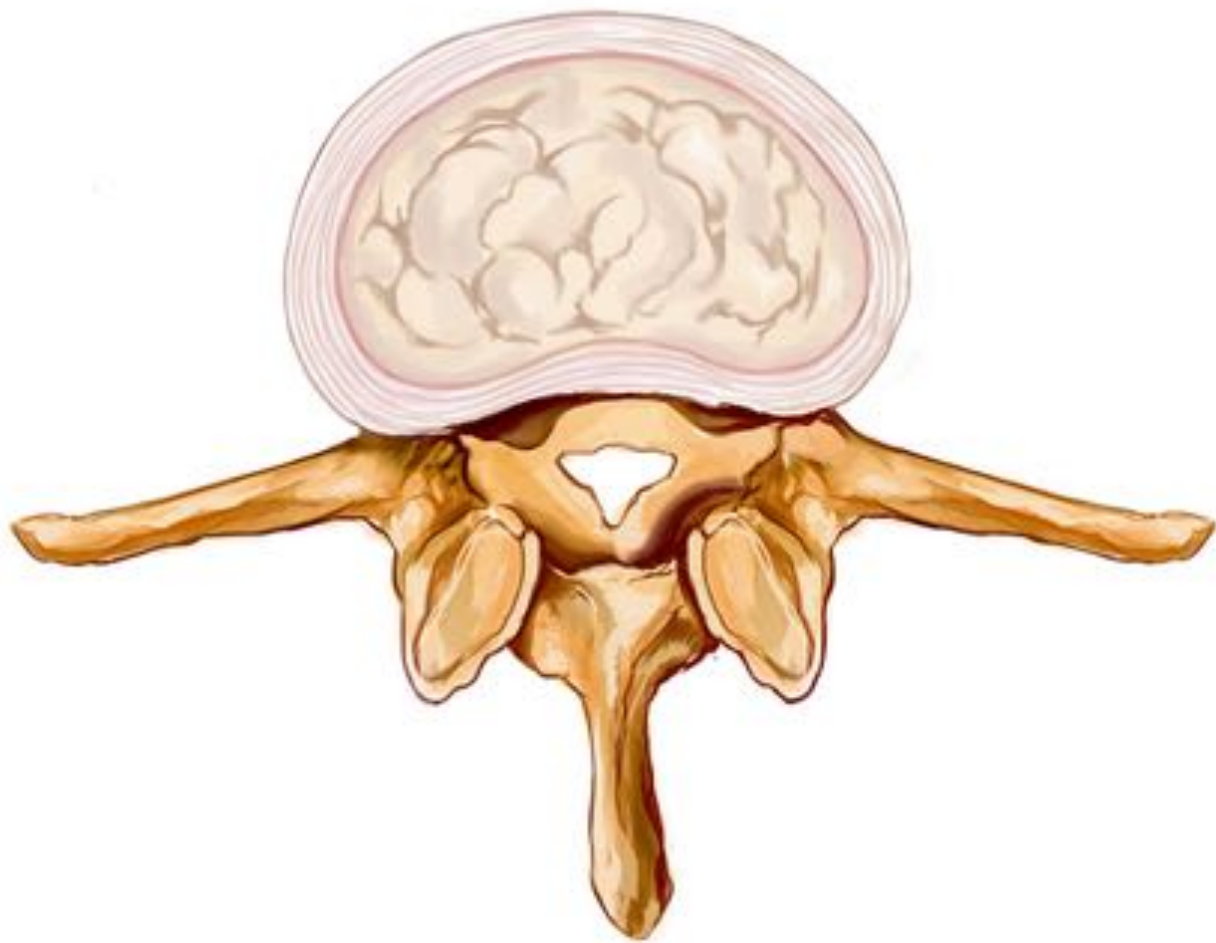
In The US:

- 200,000 cases per year

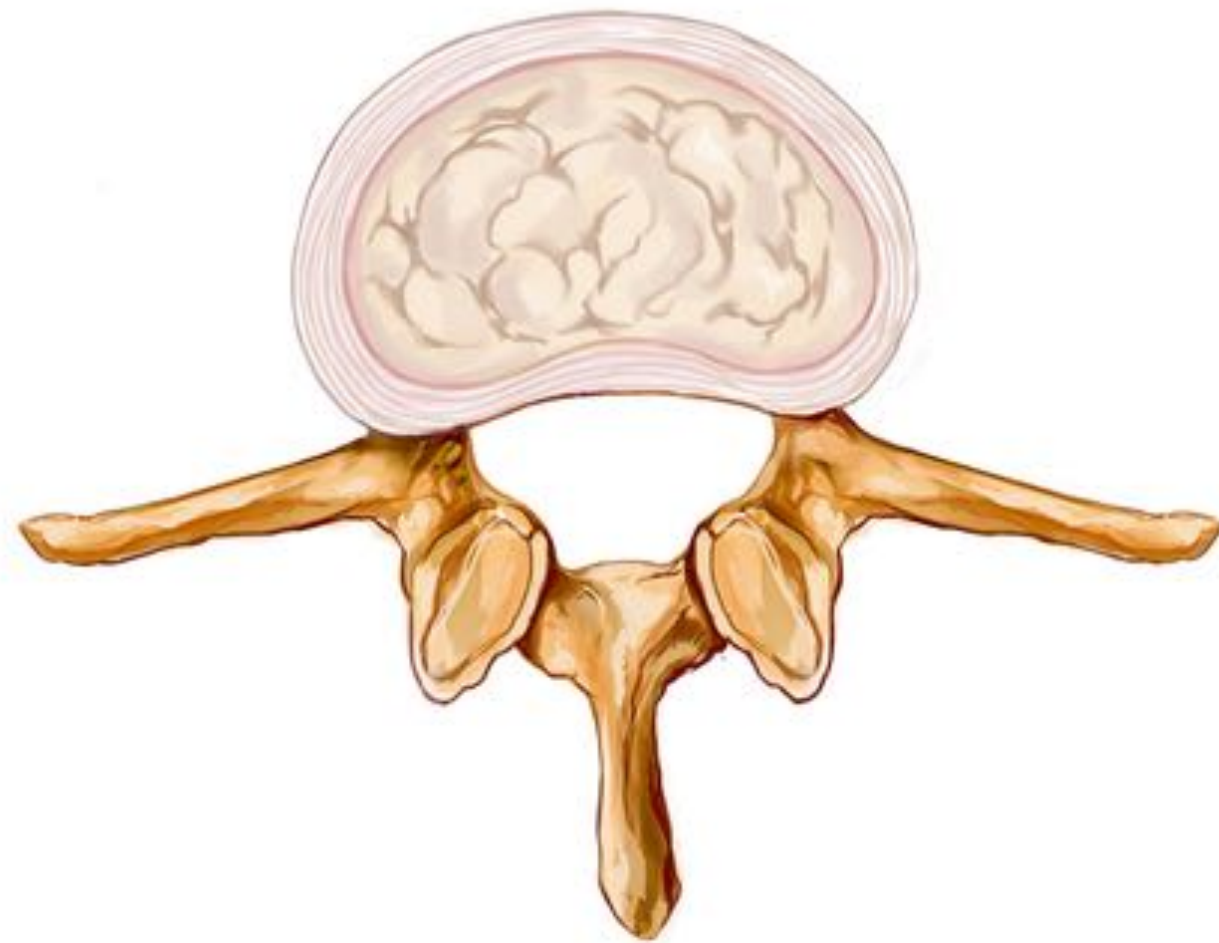


Spinal Cord (cross section)



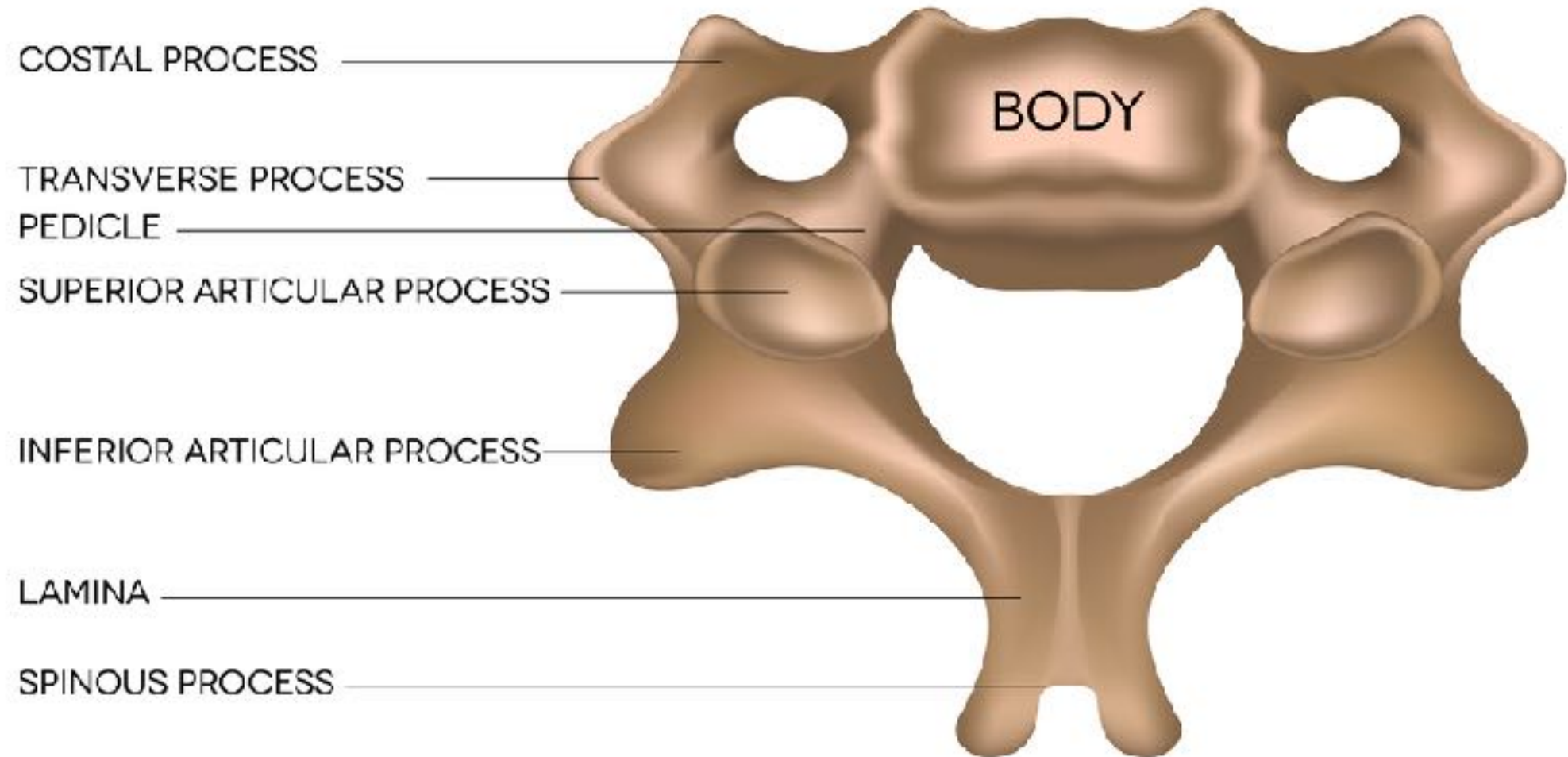


Stenosis

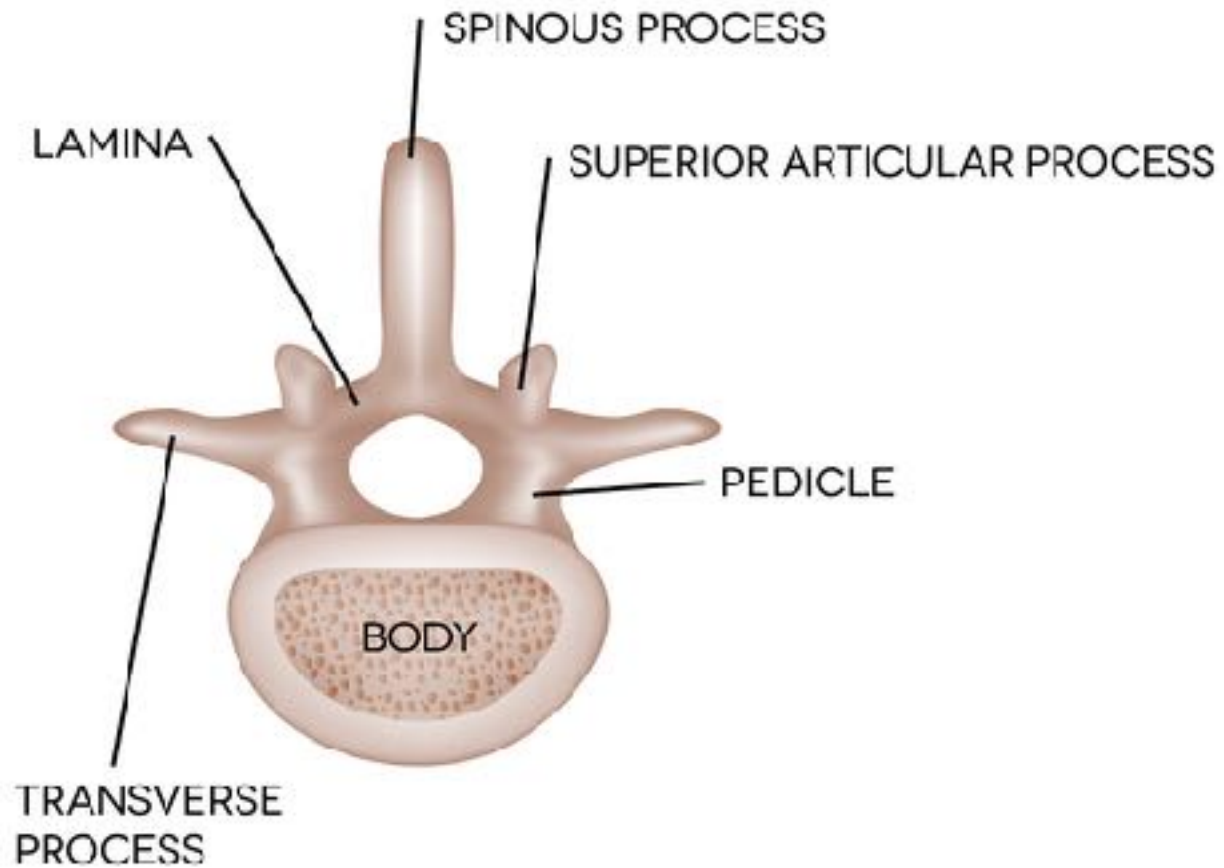


Normal

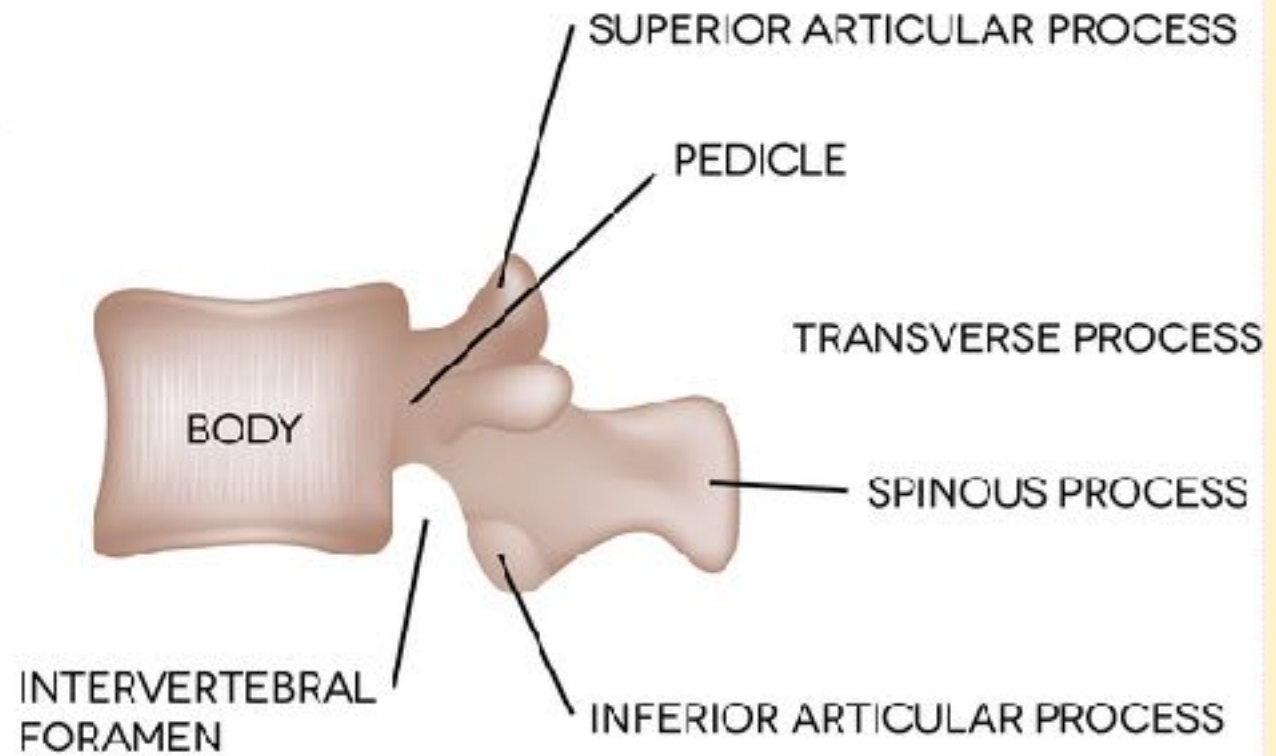
CERVICAL VERTEBRA



SUPERIOR VIEW



LATERAL VIEW



Symptoms

- pain: back, legs, thighs, buttocks
- numbness
- muscle weakness- abnormal walking, cramping
- impaired bladder and bowel control



Causes

- age-related wear and tear
- Mostly effects people over 60
- Most spinal stenosis occurs when something happens to **reduce the amount of space available** within the spine such as:
 - Overgrowth of Bone: Osteoarthritis and bone spurs
 - Herniated discs
 - Thickened ligaments
 - Spinal Injuries



The Medical Solution

- **Medications:**

- Anti-inflammatories
- Prescription Painkillers

- **Physical Therapy**

- **Surgery**



Medications

- Nonsteroidal Anti-inflammatory Drugs (NSAIDs)
- Muscle Relaxants
- Antidepressants
- Anti-seizure Drugs
- Opioids



Nonsteroidal Anti-inflammatory Drugs (NSAIDs)

- OTC Anti-inflammatories: Naproxen (Aleve), Ibuprofen (Advil)
- Prescription: Pregabalin (Lyrica), Gabapentin (Gralise)

Used by 60 million Americans

For Pain relief and reduction of inflammation?

Effects or Side Effects of NSAIDs?

- Cardiovascular problems
- Gastrointestinal bleeding
- Ulcers
- Kidney Problems
- increased blood pressure



Effects or Side Effects of NSAIDs?

*"Conservative calculations estimate that approximately **107,000** patients are hospitalized annually for non-steroidal anti-inflammatory drug (NSAID)-related gastrointestinal (GI) complications.*

*And at least **16,500 NSAID-related deaths** occur each year among arthritis patients alone. The figures of all NSAID users would be overwhelming, yet the scope of this problem is generally under-appreciated."*

American Journal of Medicine

Effects or Side Effects of NSAIDs?

*“Researchers found that people who used NSAIDs were **1.8 times** more likely to be diagnosed with atrial fibrillation in comparison to people who did not take the pain relievers.*

People who were chronic and current users had a,

76 percent increased risk of atrial fibrillation.”

British Medical Journal

More NSAID Effects

- **40-60% increased risk of Cardiovascular problems**
- **25% increased risk of Hearing loss**
- **Increased risk of GI bleeding, abdominal pain, vomiting**
- **7,000 hospitalized for GI complications every year**
- **60% increased risk of congenital heart failure**
- **10-30% increased risk of allergic reactions like Asthma**
- **80% risk of miscarriage**

Muscle Relaxants

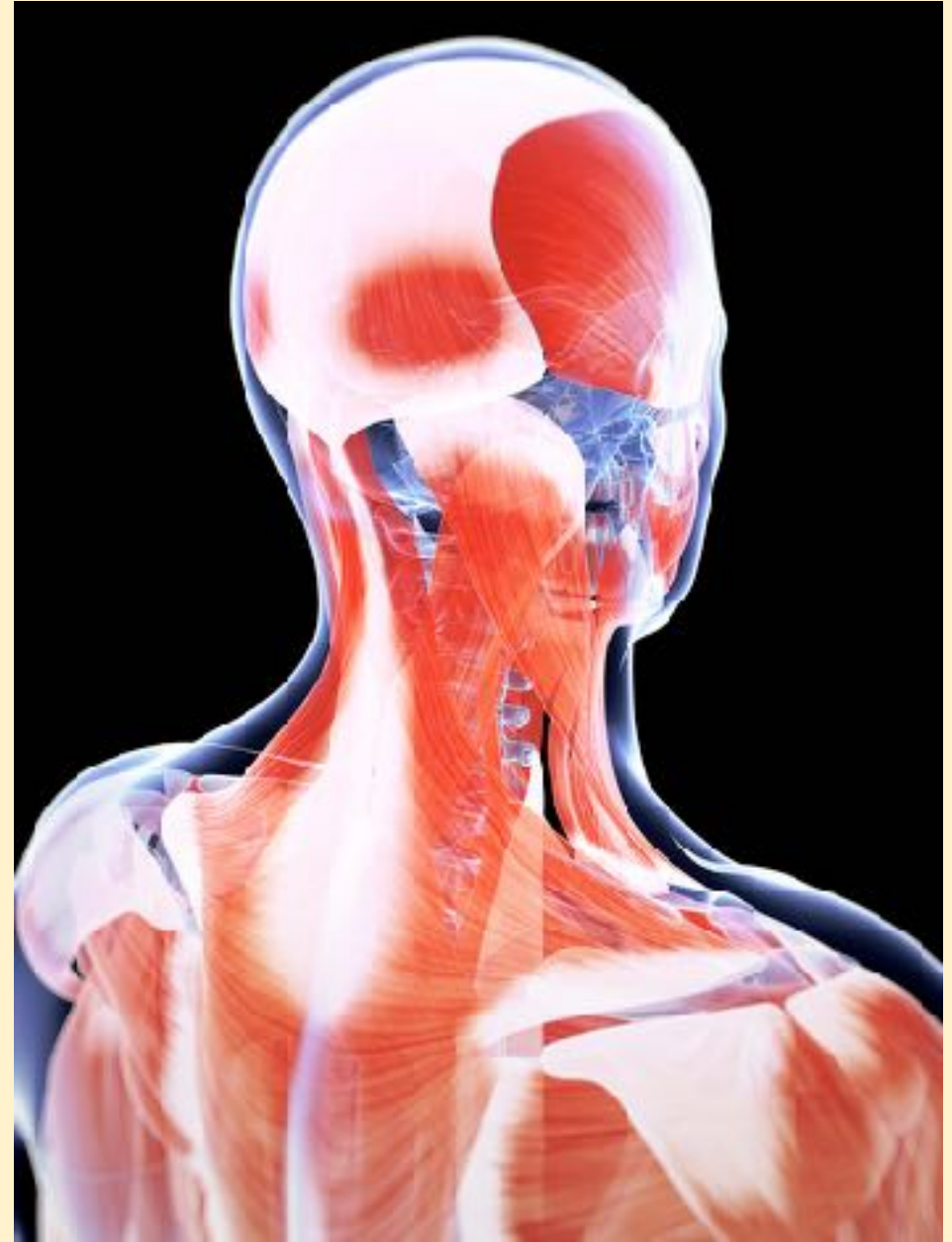
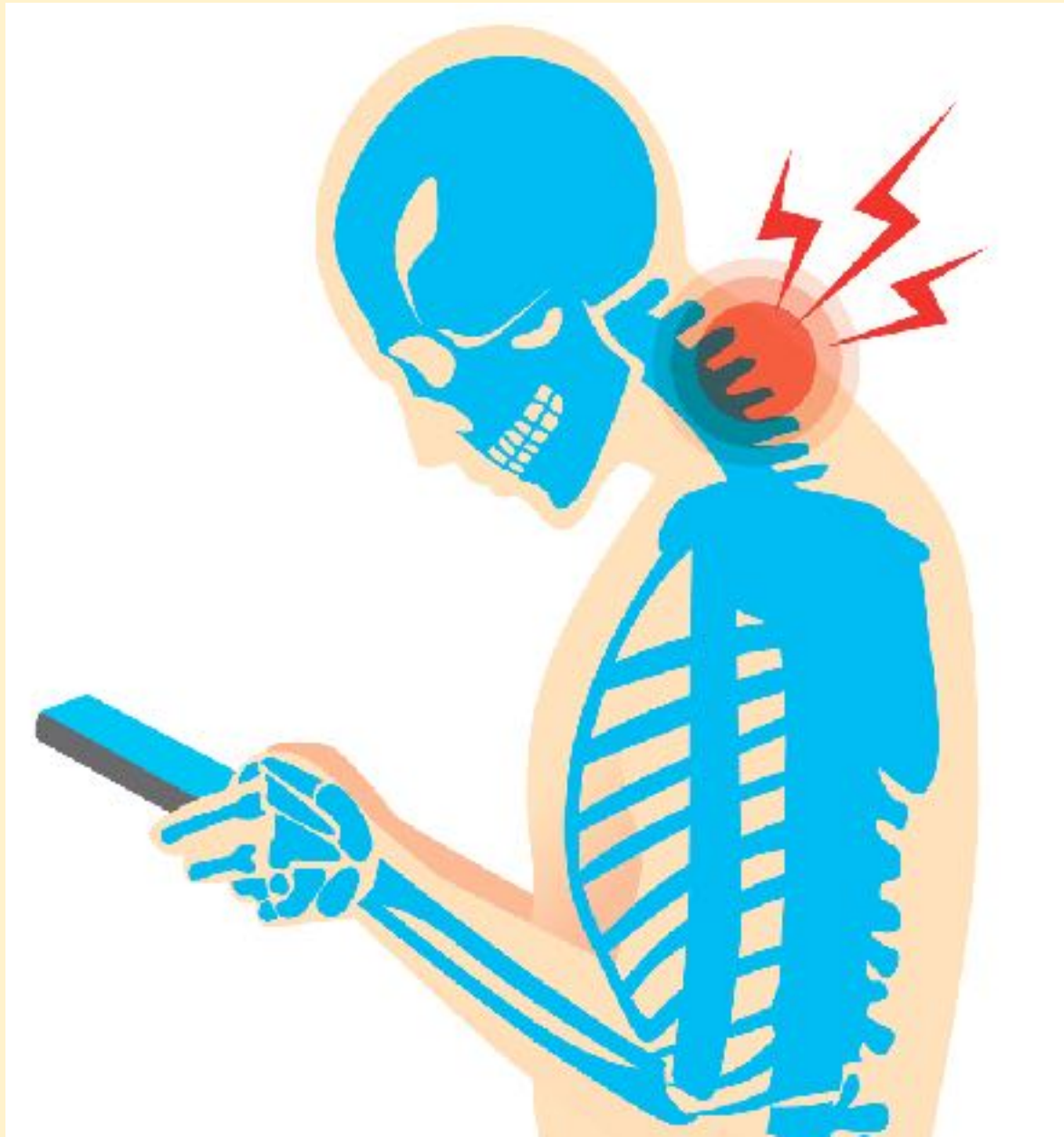
- cyclobenzaprine (Amrix, Fexmid)

For calming muscle spasms?

Why you should never relax the muscles!

- The Paraspinal muscles are maintaining the structure of the spine
- These muscles are controlled by the Nervous System
- You have no conscious control over these muscles

Don't Relax the Muscles!!!



Antidepressants

- tricyclic antidepressants like Amitriptyline
- **1 in 10 Americans** are taking Antidepressants
 - and *1 in 4* among women aged 50 to 64

For chronic pain relief?

Effects of Antidepressants

- may double your risk of **bone fractures**
- 45 percent more likely to suffer a **fatal stroke**
- 32% increased risk of **heart disease**
- Linked to violent behavior, murder, suicide and more

Anti-Seizure Drugs

- gabapentin (Neurontin, Grails, Horizant)
- pregabalin (Lyrica)

For pain caused by damaged nerves?

Effects

- increased risk of **suicidal thoughts and behaviors**
- increased risk of **memory loss and dementia**
- **alopecia (hair loss)**

Opioids

- oxycodone (Percocet, OxyContin)
- hydrocodone (Norco, Zohydro)

Effects

- Opioid drugs cause over **13,800 death each year**
- Prescription pain killers have surpassed both heroin and cocaine as the leading cause of fatal overdoses.
All illegal drug overdoses= 10,000 per year
- **700,000** emergency room visits each year from adverse drug reactions

U.S. Food and Drug Administration (FDA)

- Properly prescribed and administered drugs cause about **106,000 deaths each year**
- prescription drugs are the **4th- leading caused of death** in the U.S.

Steroid Injections

- corticosteroids

Effects

- Deteriorates Cartilage and bone
- Weakens connective tissue



Steroid Injections

“Steroid injections don’t work for everyone. And repeated steroid injections can weaken nearby bones and connective tissues.”

Mayo Clinic



Surgery

Laminectomy

- -Removes the lamina of the affected vertebra.
- -The vertebra may need to be linked to adjoining vertebrae with metal hardware and a bone graft to maintain the spine's strength.

Laminotomy

- -removes only a portion of the lamina by carving a hole in the vertebra

Laminoplasty

- -opens up space in the spinal canal by creating a hinge on the lamina with metal hardware bridges.

Surgery

- **600,000** people undergo spine surgery each year in the US
- At the cost of **\$600 billion** each year
- 30-40% experience postoperative complications
- *return-to-work rate one year after a spinal surgery is 15%*
- *Spinal surgeries have a **75-80% failure rate***

“Some people’s symptoms stay the same or get worse after surgery. Surgical risks include infection, a tear in the membrane that covers the spinal cord, a blood clot in a leg vein and neurological deterioration.”

Mayo Clinic

Failed Back Surgery Syndrome (FBSS)

- refers to chronic **back** and/or leg pain that occurs after **back (spinal) surgery**, usually after laminectomy. It is characterized as a chronic pain syndrome.

“By far the number one reason back surgeries are not effective and some patients experience continued pain after surgery is because the lesion that was operated on is not in fact the cause of the patient’s pain.”

Peter Ullrich, MD, Orthopedic Surgeon

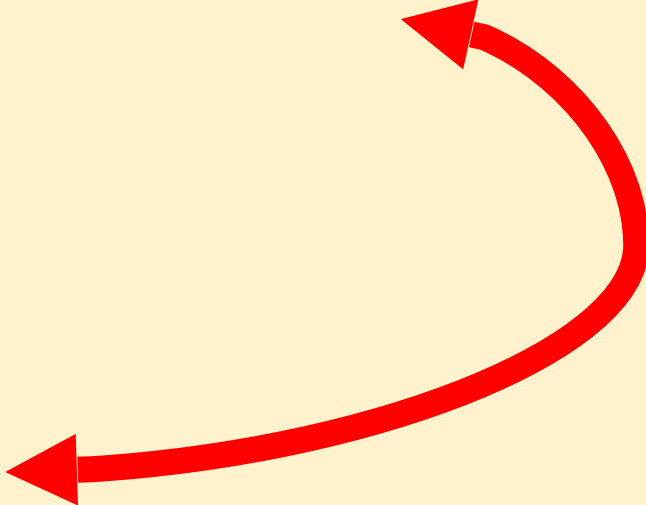
The Ridiculous Medical Solution

Medications


- Nonsteroidal Anti-inflammatory Drugs (NSAIDs)
- Muscle Relaxants
- Antidepressants
- Anti-seizure Drugs
- Opioids

Steroid Injections

Surgery



These keep you
Comfortable while
the problem worsens



This doesn't work and
may make things worse

The Real Solution, The Only Solution

Causes of Spinal Stenosis:

- Arthritis
- Herniated discs
- Thickened ligaments
- Spinal Injuries

The Real Solution, The Only Solution

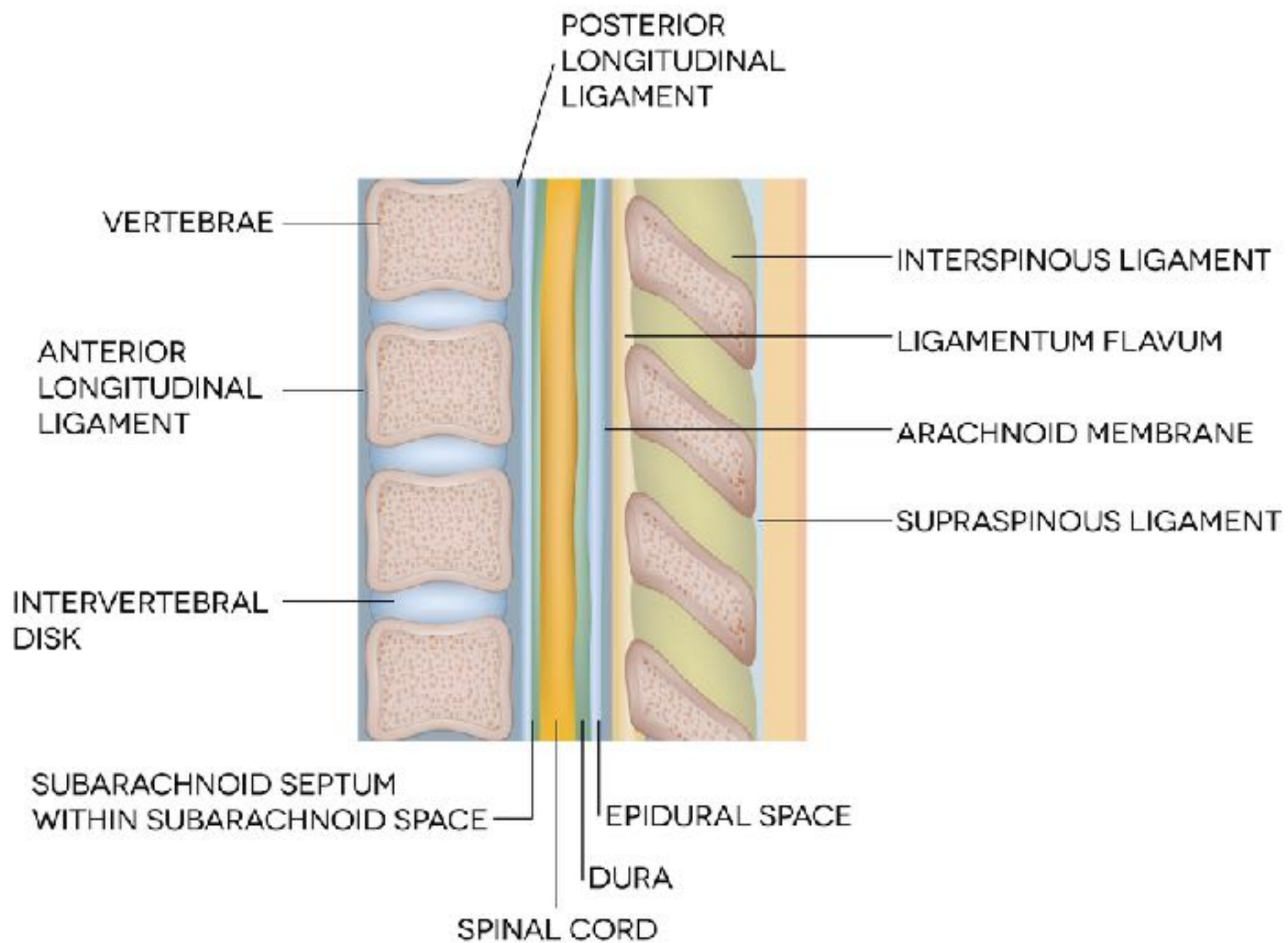
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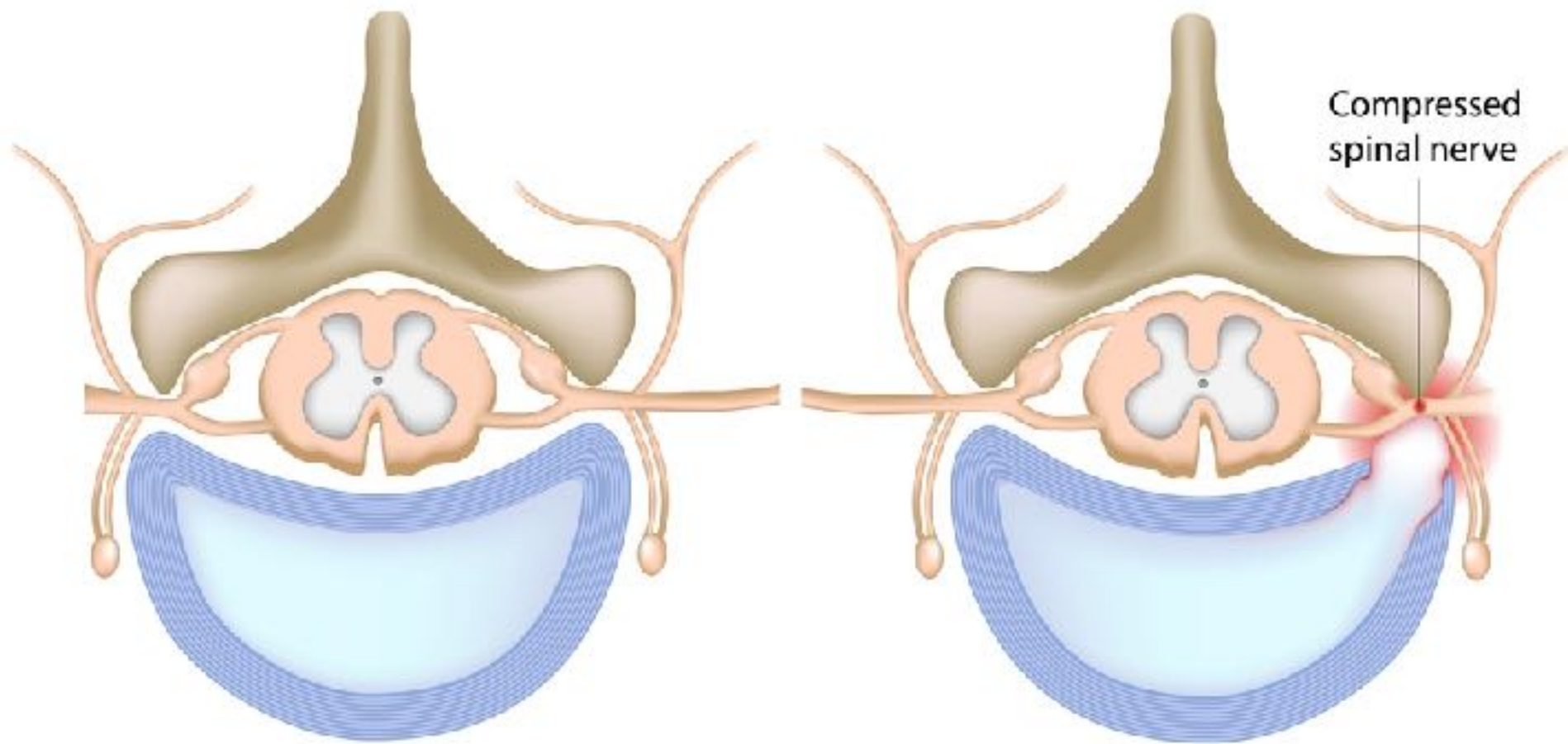
Chiropractic Care can:

- Reverse Arthritis
- regenerate/restore discs
- Change tension on ligaments
- Correct structural damage





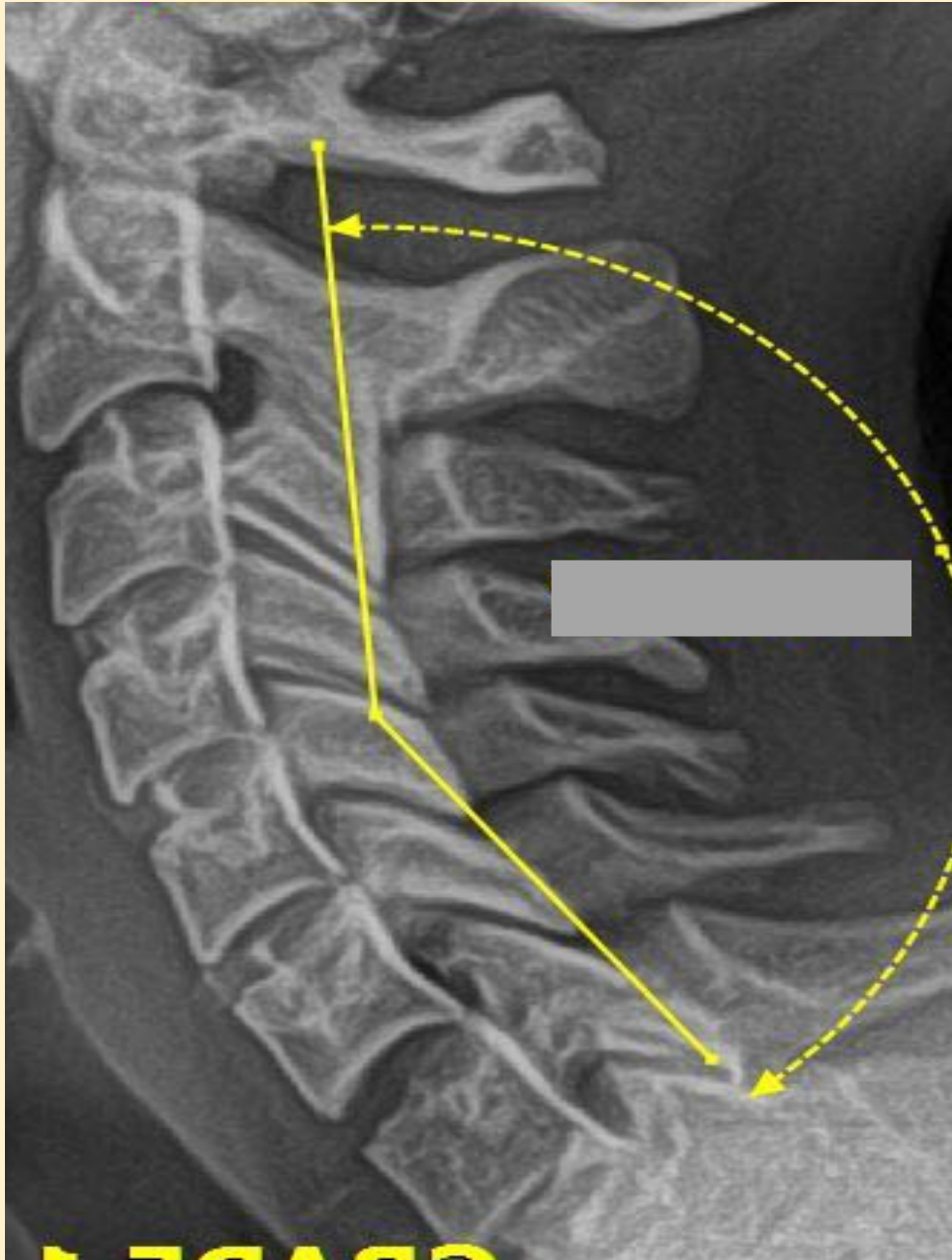
Spinal disc herniation

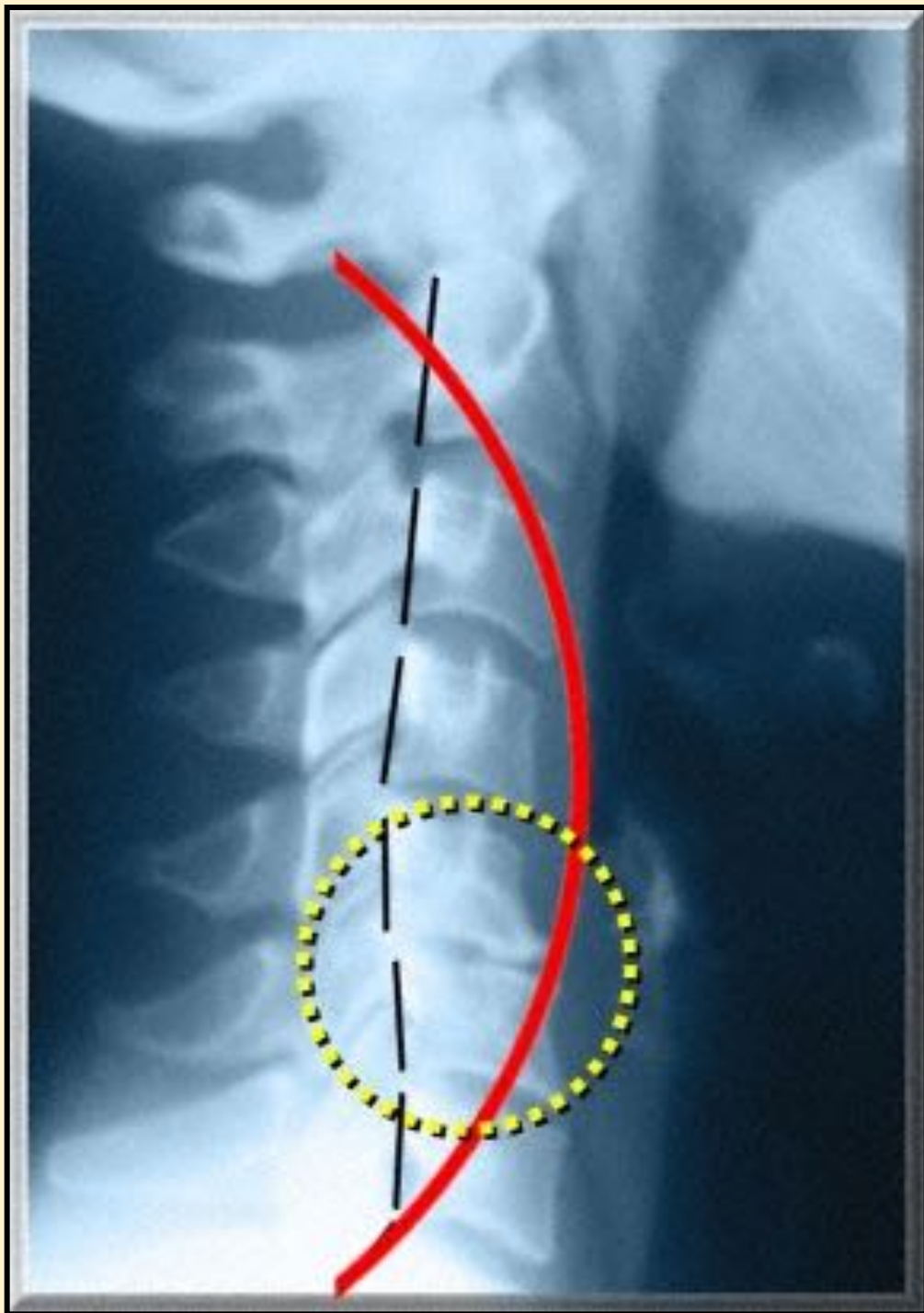


Normal disc

Herniated disc

Healthy Discs = Movement and alignment and Canal





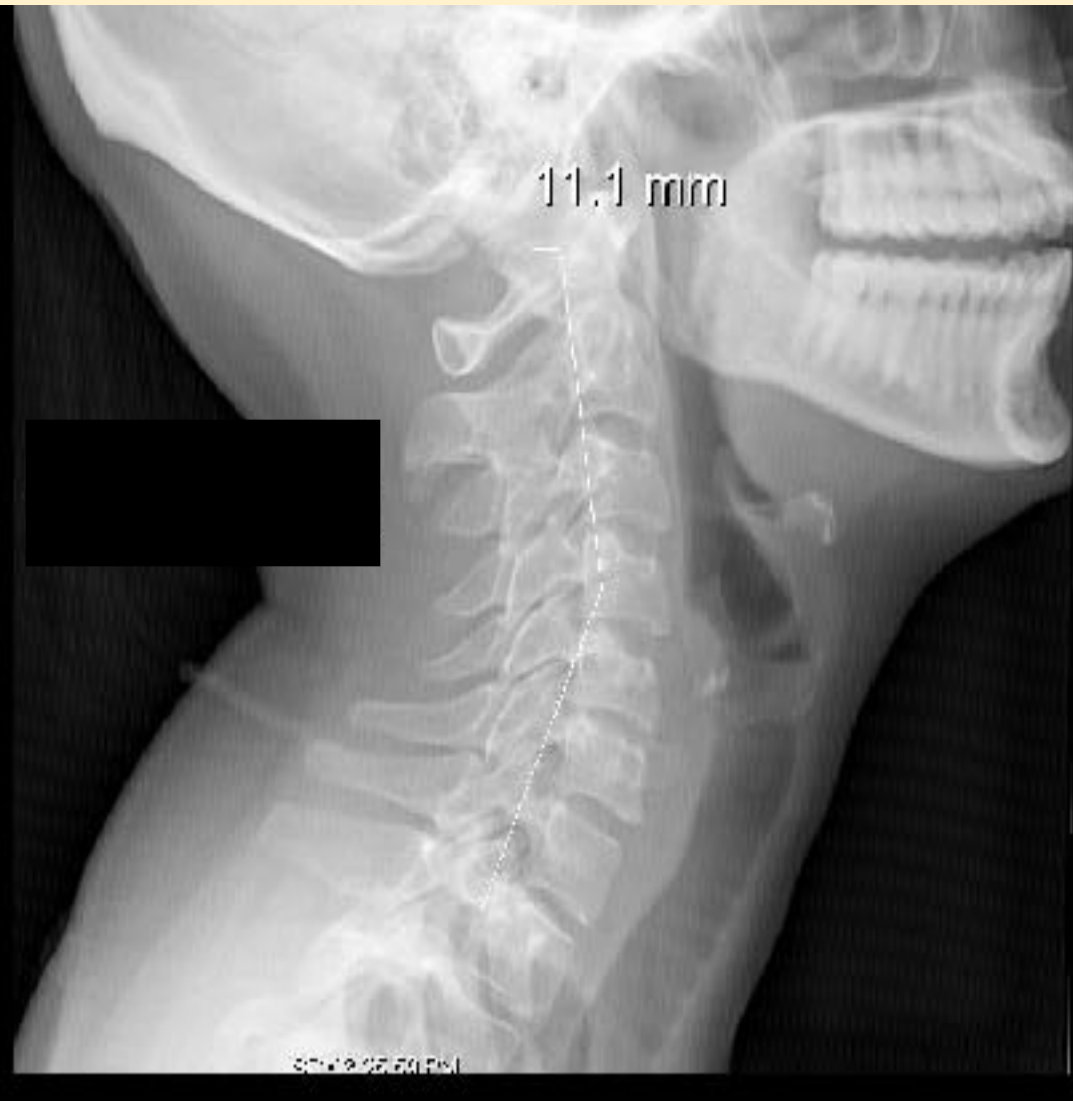
Reversed Curve

Before



Near Normal Curve

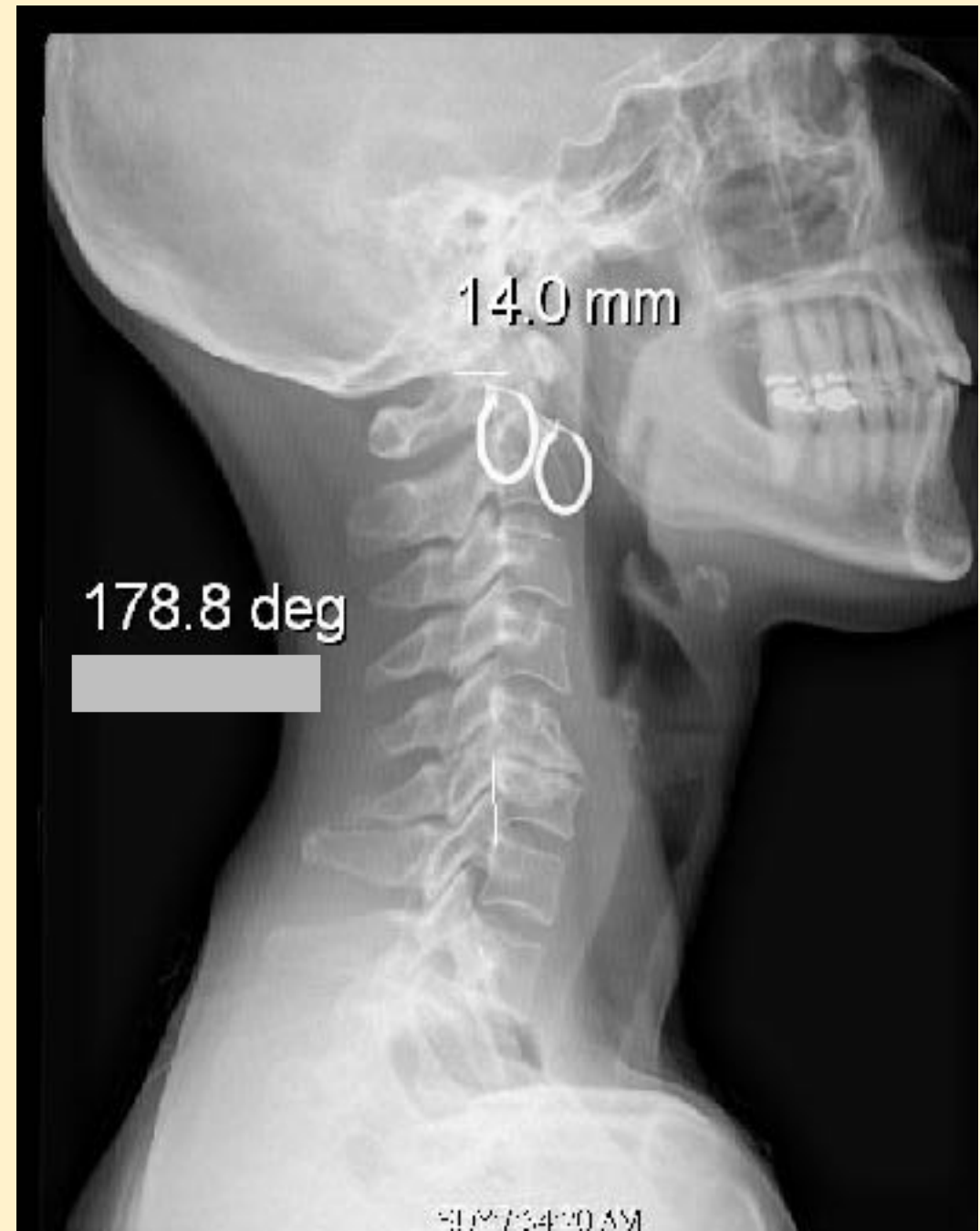
After



Before



After



Before

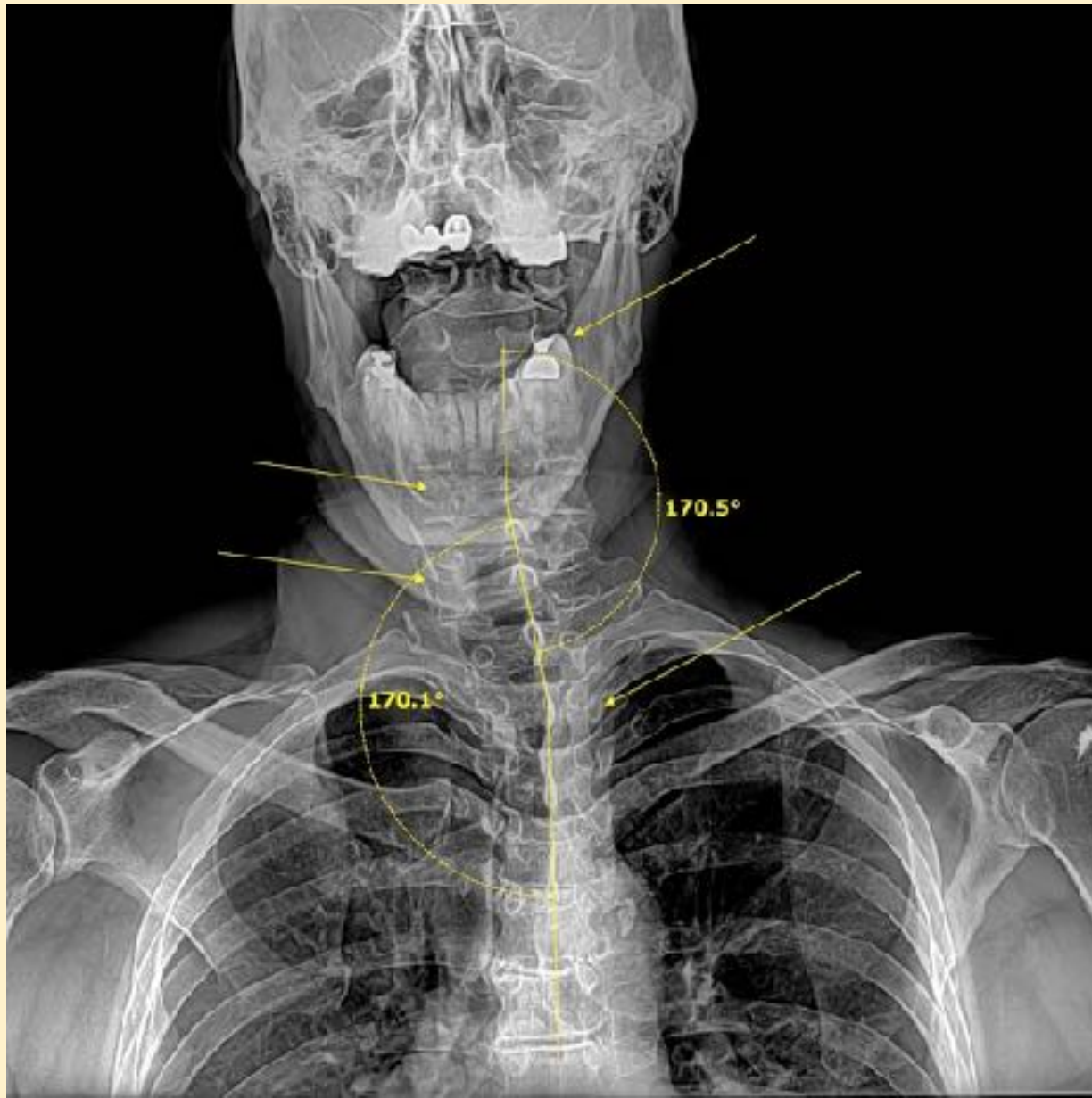


After



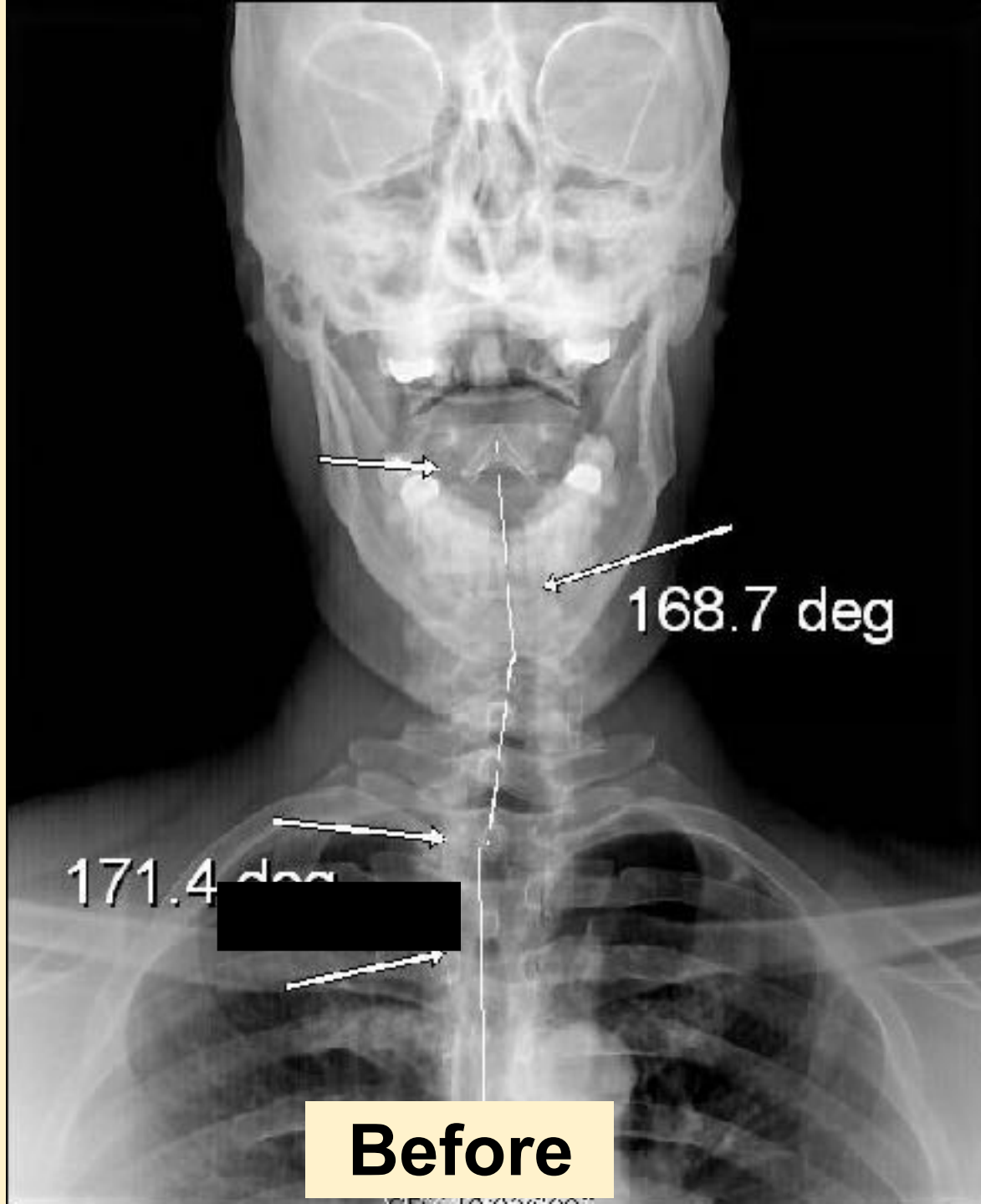
Corrective Chiropractic

Before

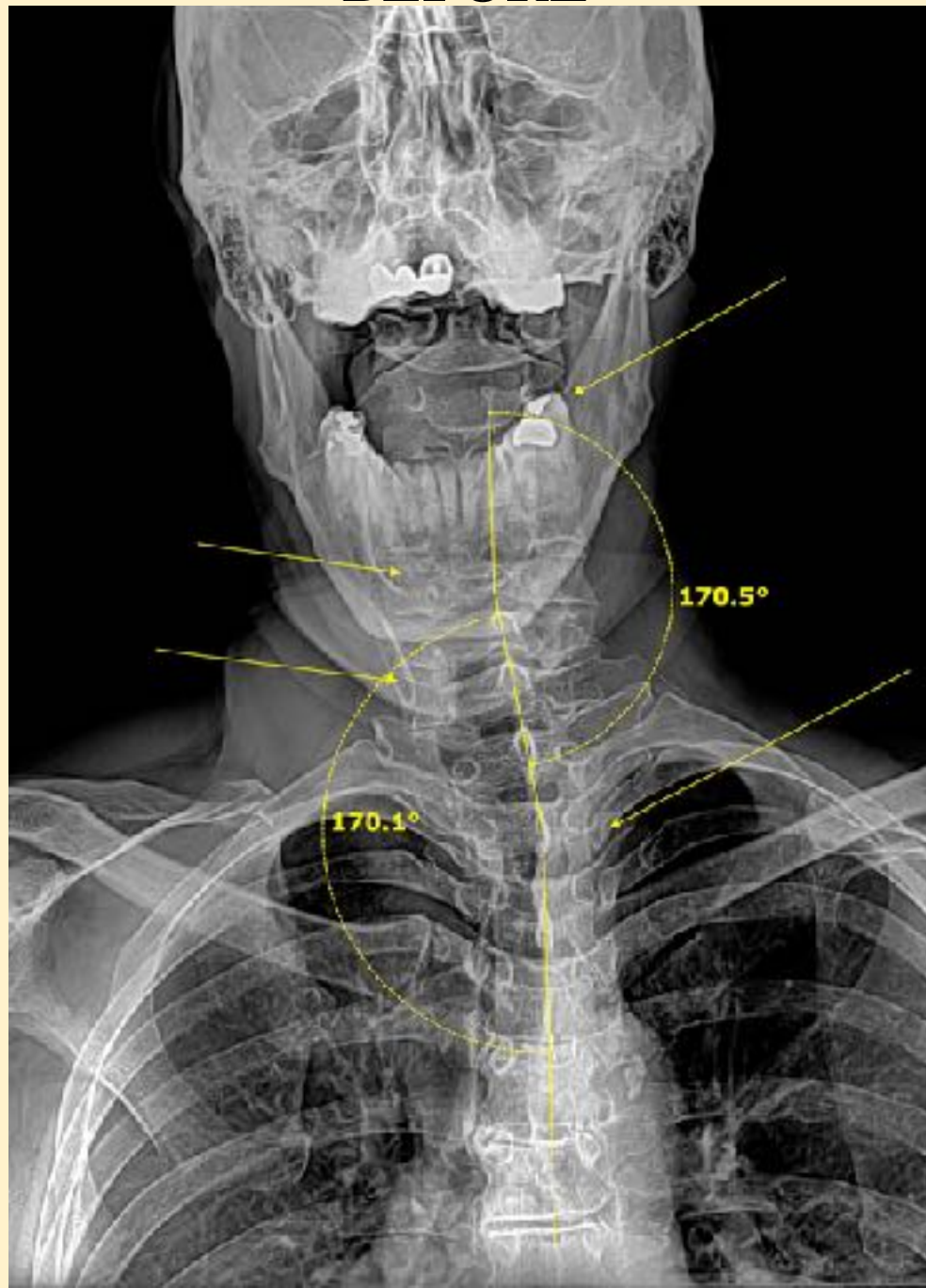


90 Days After

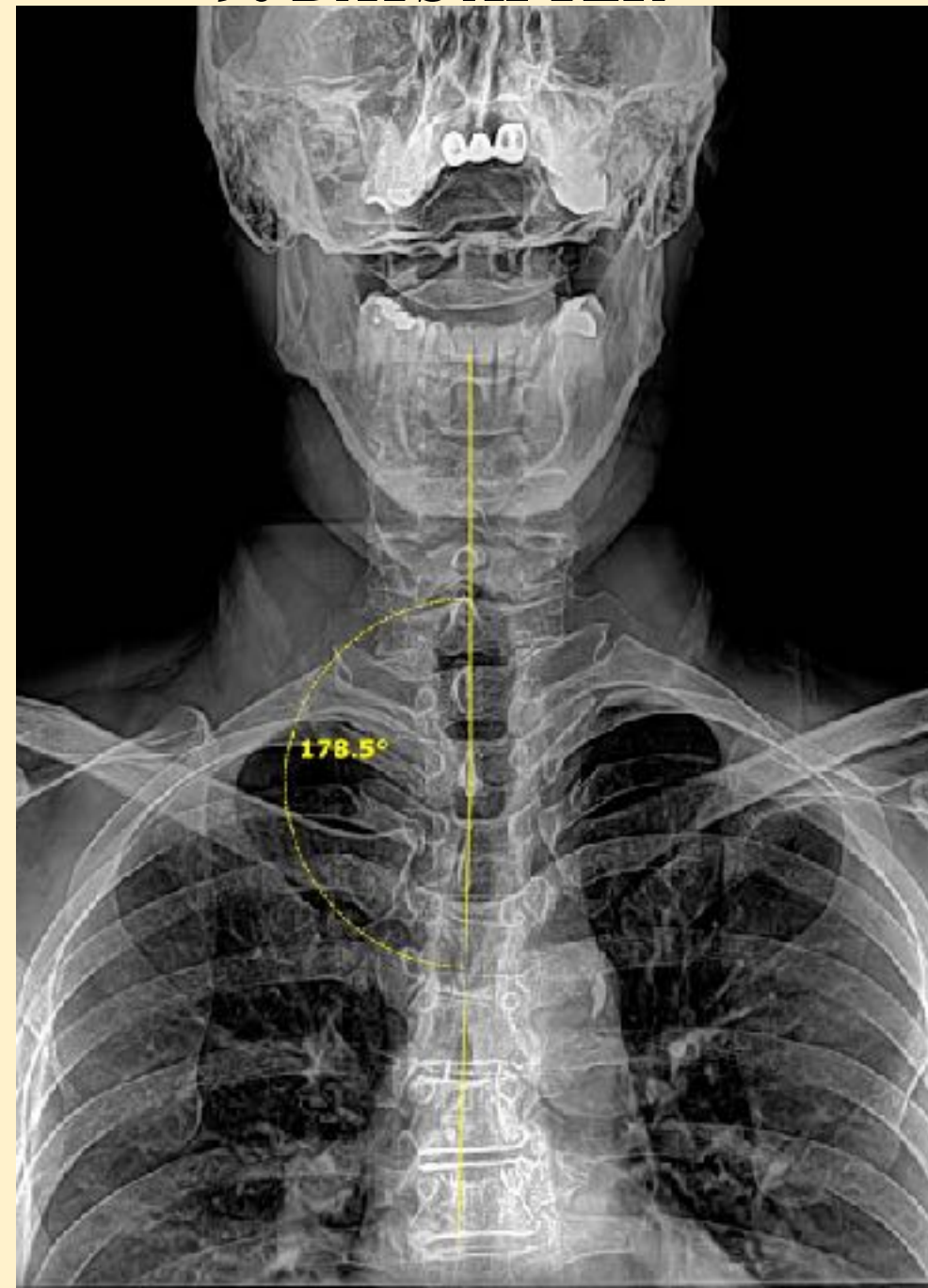




BEFORE



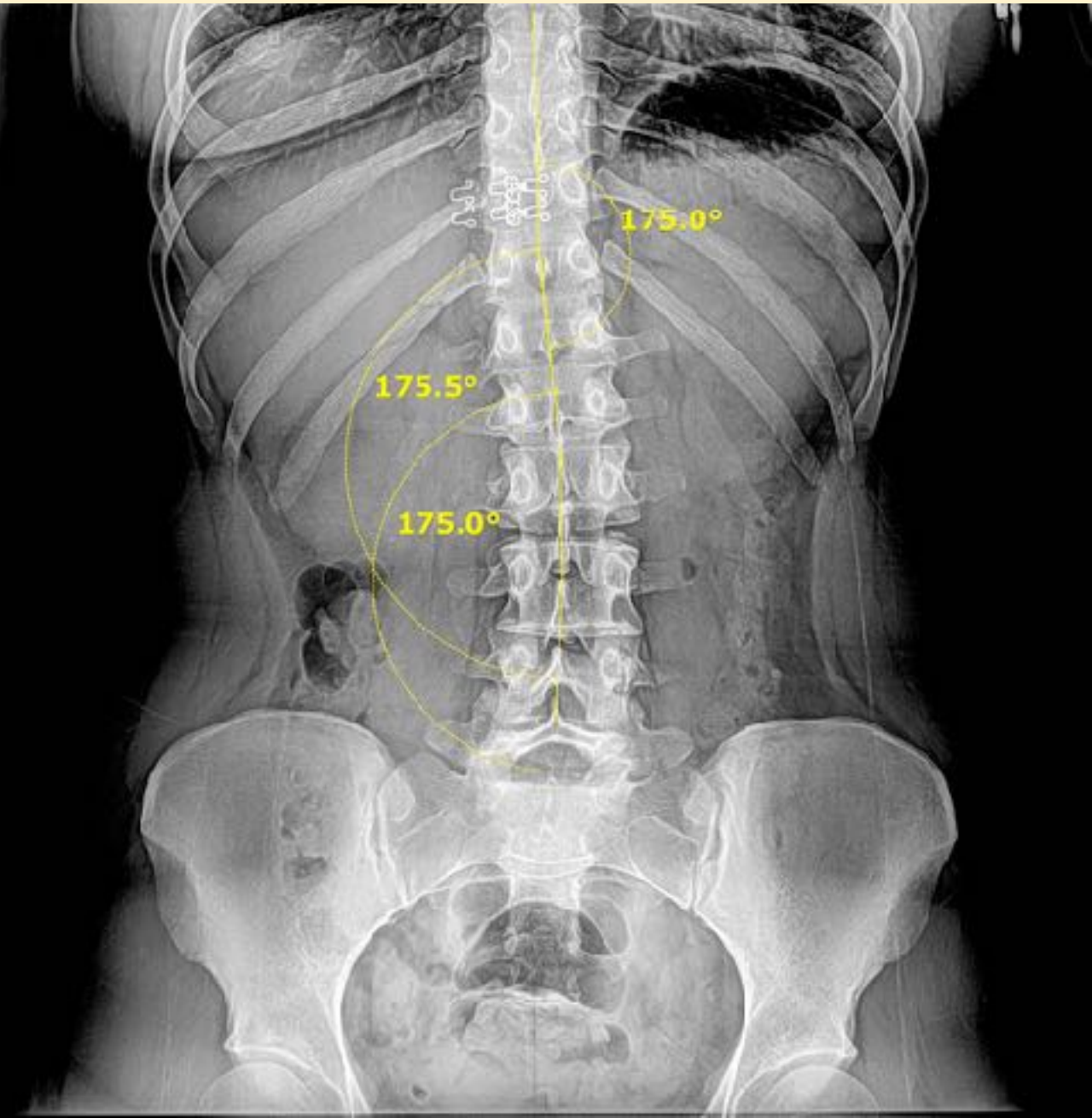
90 DAYS AFTER



Before



After



Natural Pain Relievers and Anti-inflammatories

- **Omega-3:** are precursors to mediators of inflammation called prostaglandins.
- **Boswellia** (Indian Frankincense): contains specific active anti-inflammatory ingredients.
- **Curcumin:** reduced pain, blocks inflammatory pathways and increased mobility.
- **Cayenne Cream:** helps alleviate pain by depleting your body's supply of substance P, a chemical component of nerve cells that transmits pain signals to your brain.
- **Devil's Claw** (South African herb): decreases inflammatory pain

Natural Pain Relievers and Anti-inflammatories

- **Vitamin D:** vital for pain reduction mechanisms
- **Astaxanthin:** one of the most effective fat-soluble antioxidants known and far more effective than anti-inflammatory drugs
- **Ginger:** anti-inflammatory and pain relief
- **Bromelain:** enzyme, found in pineapples, is a natural anti-inflammatory.
- **Cetyl Myristoleate (CMO):** found in fish and dairy butter, acts as a "joint lubricant" and an anti-inflammatory

The 5 Keys to Health and Healing



Proper nerve supply



Regular Exercise



Proper Nutrition



Sufficient Rest



Prayer and Meditation

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