From Congestion to Flow

Restoring Function in the Head and Neck

An anatomy and physiology-based approach to improving flow

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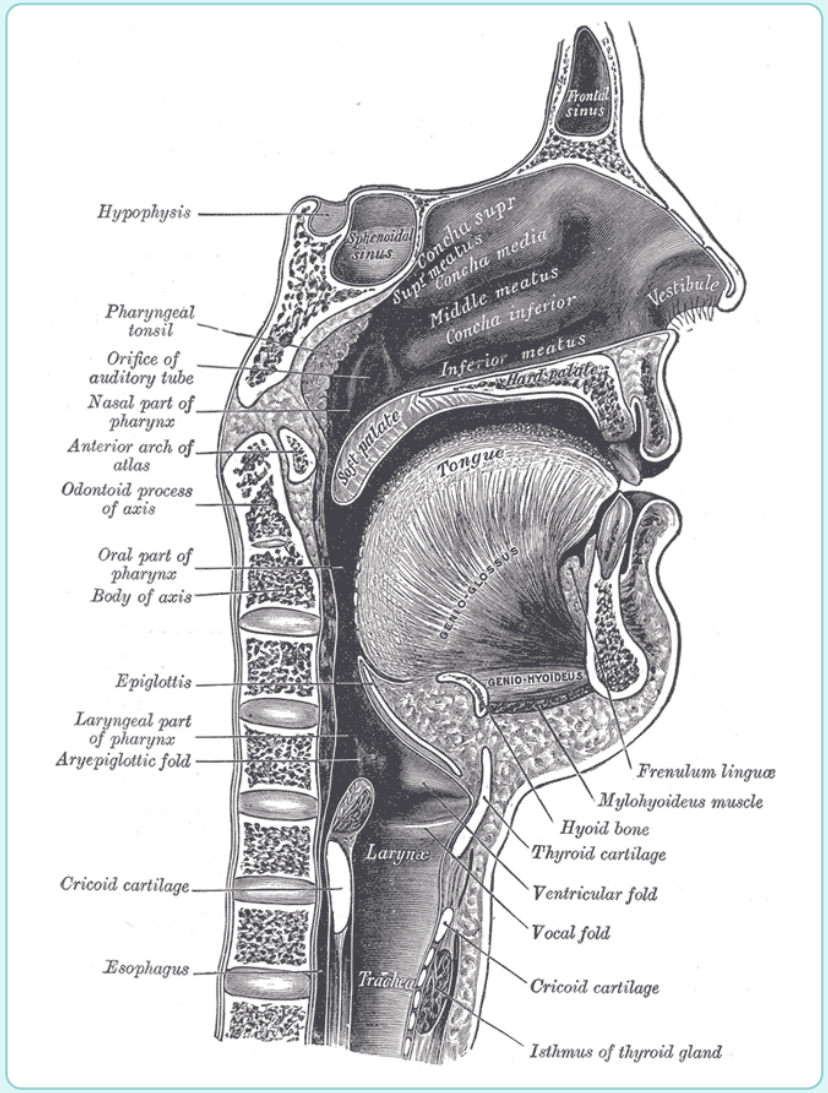
Congestion is a physiology problem: flow, pressure, and regulation.



Disclosures

- I have no financial relationships to disclose

Presentation Objectives

1) Improve understanding of the relationship of structure and function of the upper respiratory system.
2) Improve understanding of key anatomical areas in sinus and upper respiratory illness, using an anatomy and physiology-based system to assess and treat patients.
3) Improve connection between scientific information and palpatory skills to improve patient care in upper respiratory illness.
4) Provide a systematic anatomy-based treatment sequence that can be utilized by diverse health professionals, with an understanding of when to consider referral for osteopathic considerations in the chronic upper respiratory patient.

Anatomy → Physiology → Palpation → Treatment Sequence

Congestion Is Not Just Inflammation

Pressure
Fullness
Pain
Congestion
Recurrent or refractory symptoms

These symptoms often reflect impaired flow.

Pressure is physics.
Flow is physiology.

How This 60-Minute Session Is Built

Part 1: Anatomy + Self-Palpation

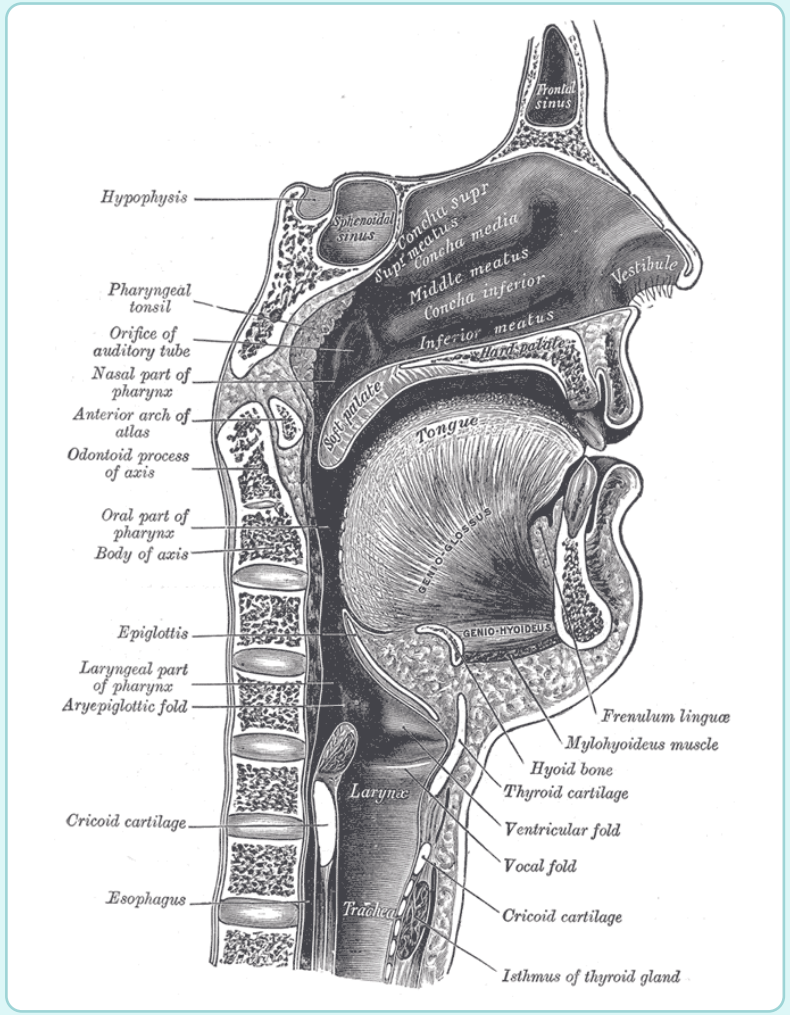
- Learn the anatomy
- Palpate your own structures
- Connect what you feel to physiology

Part 2: Partner Work

- Assess key restriction points
- Practice the 4-step sequence
- Reassess for change

Feel before you fix.

The Upper Respiratory System Is a Flow System



- Air movement through nasal passages and pharynx
- Mucociliary clearance through sinus pathways
- Lymphatic drainage from face, sinuses, and pharynx
- Venous outflow through jugular pathways
- Neural regulation of tone, secretions, and vascular dynamics

Flow determines function.

Follow the Symptom Up. Treat the Flow Down.

Clinical Reasoning-The Drain is Clogged.. The Plummer is here...

- Symptoms are real but are often not the root cause...looking at how symptom correlates with structure-function
- Start where the patient feels it
- Sinus / ear / throat symptoms
- Trace restriction upstream toward neck outflow

Treatment Sequencing- The Drain does not act alone but is part of a system...a Holistic Strategy

- Correlate symptom to physiologic pattern Open outflow first
- Support lymphatic and venous return
- Then address the local sinus region
- Removing obstructions of self-healing mechanisms

4 Key Anatomical Transition Zones

1 Paranasal sinuses

anterior vs posterior drainage pathways

2 Eustachian tube

pressure equalization and drainage

3 Nasopharynx / lymphatics

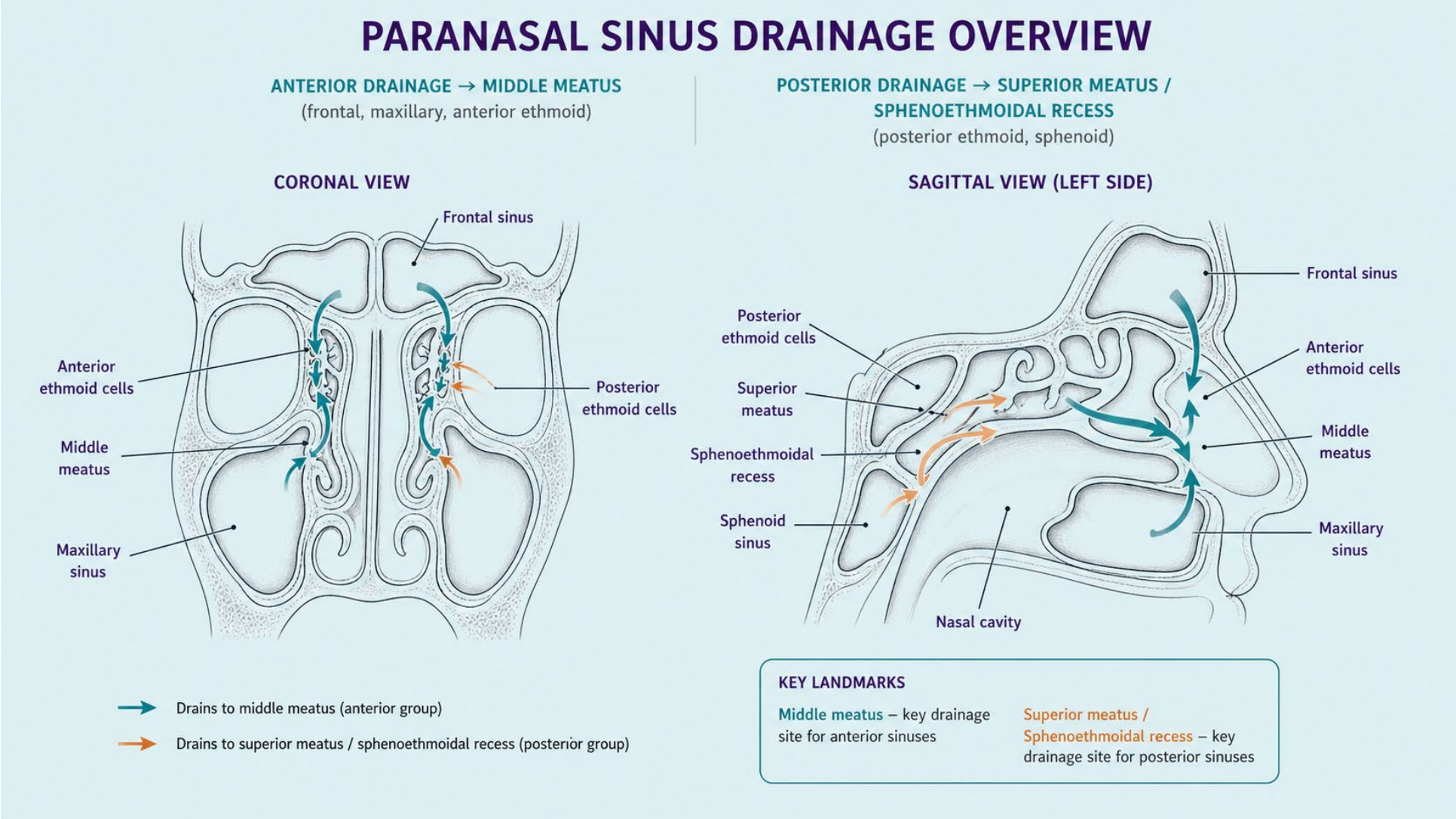
convergence of sinus, ear, and immune drainage

4 SCM / scalene corridor

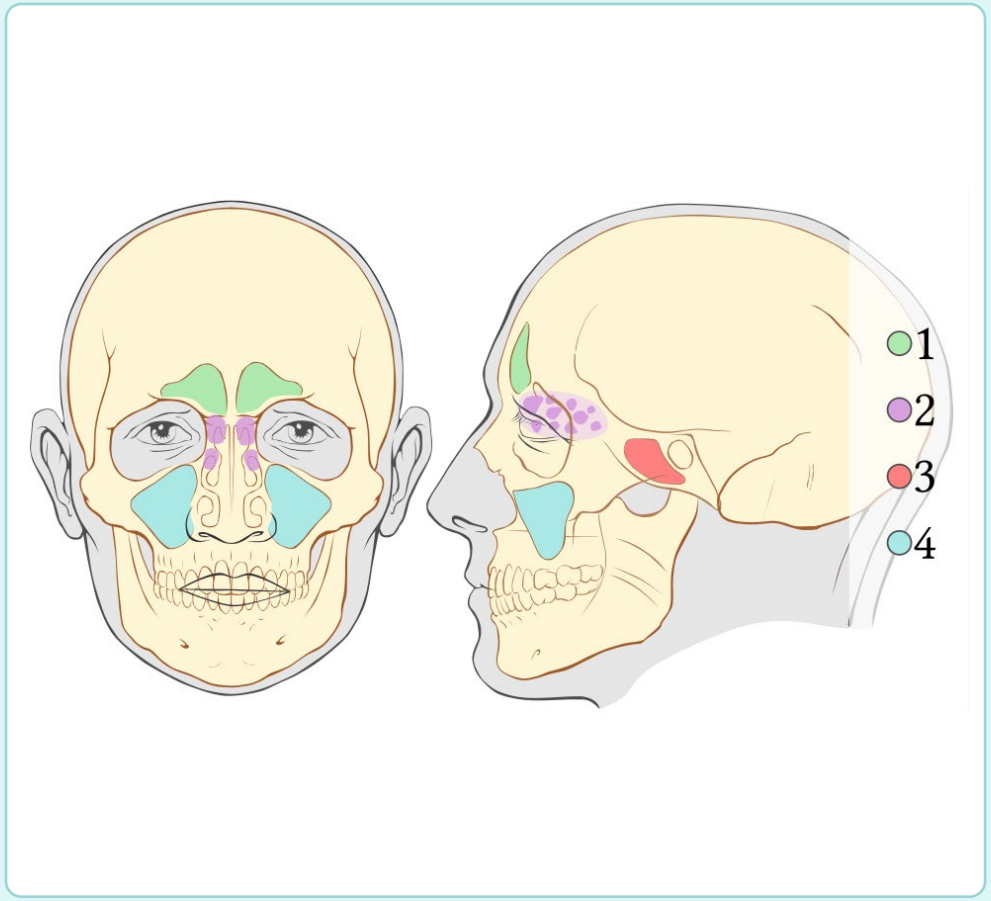
neck outflow bottleneck

Each zone has anatomy you can understand and tissue you can palpate.

Paranasal Sinus Drainage Overview



Anterior Sinuses: Osteomeatal Complex



Middle meatus = key drainage corridor

- Drains frontal, maxillary, and anterior ethmoid sinuses

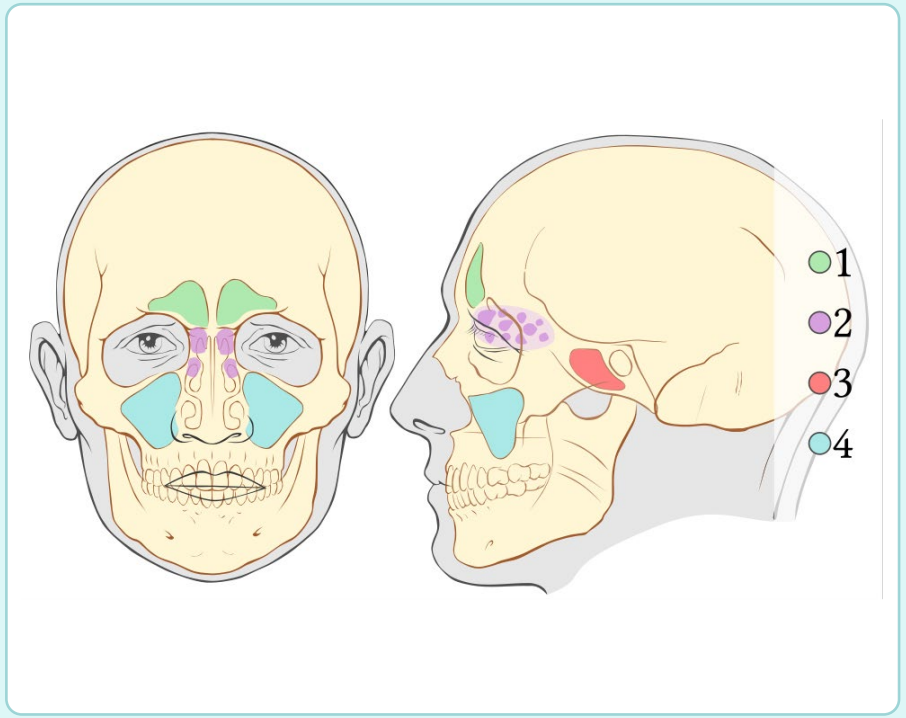
Mucosal edema or restriction can create a high-impact bottleneck

Often clinically relevant for direct sinus techniques

Multiple anterior sinuses depend on one primary exit pathway.

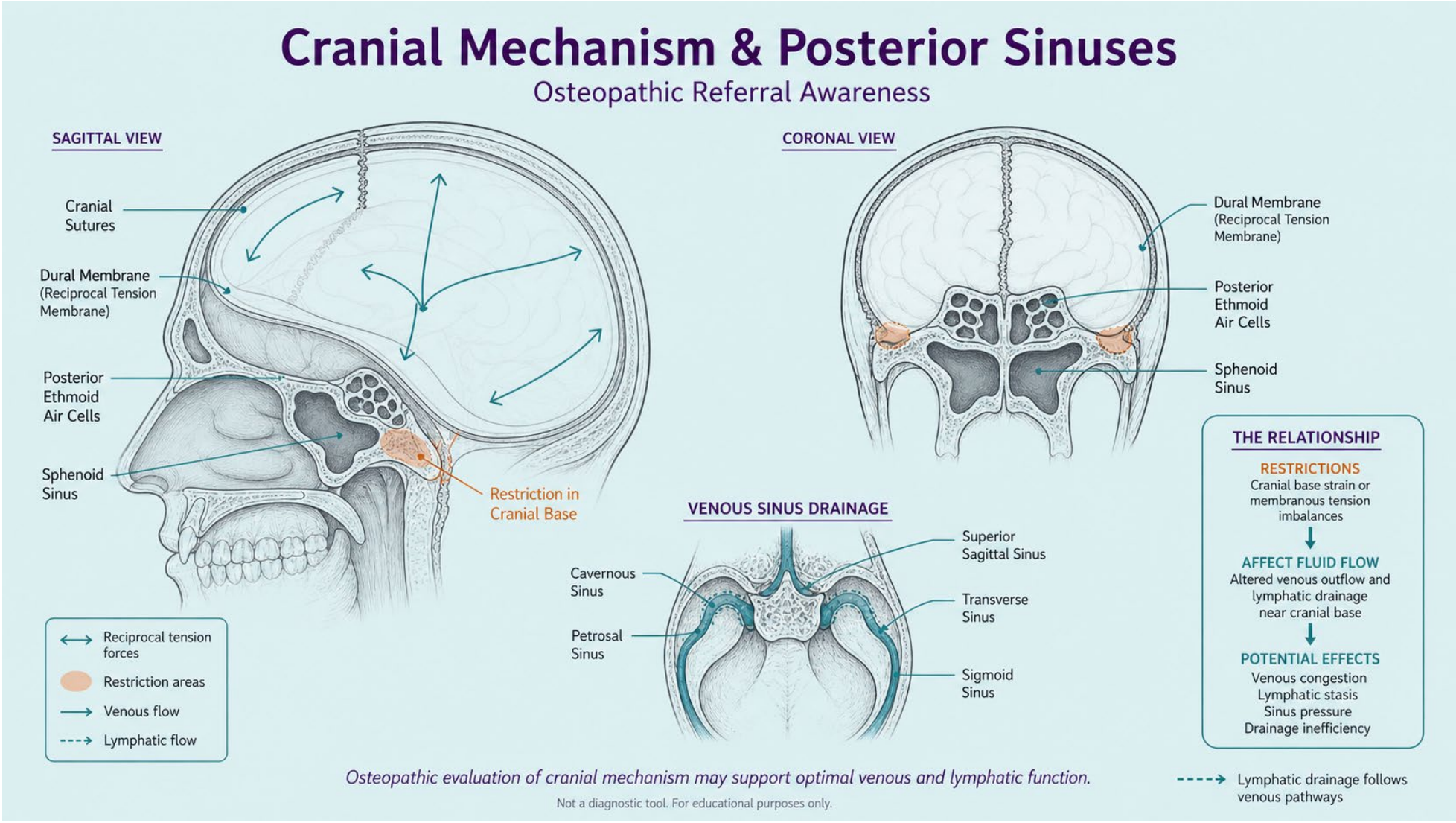
Self-Palpation: Maxillary Sinus Awareness

- Observe and feel left/right maxillary sinus asymmetry
- Notice tenderness, density, fullness, or reduced tissue spring
- Layer your attention: skin → bone → mucosal/fluid space
- This assessment will later connect to the maxillary sinus pump

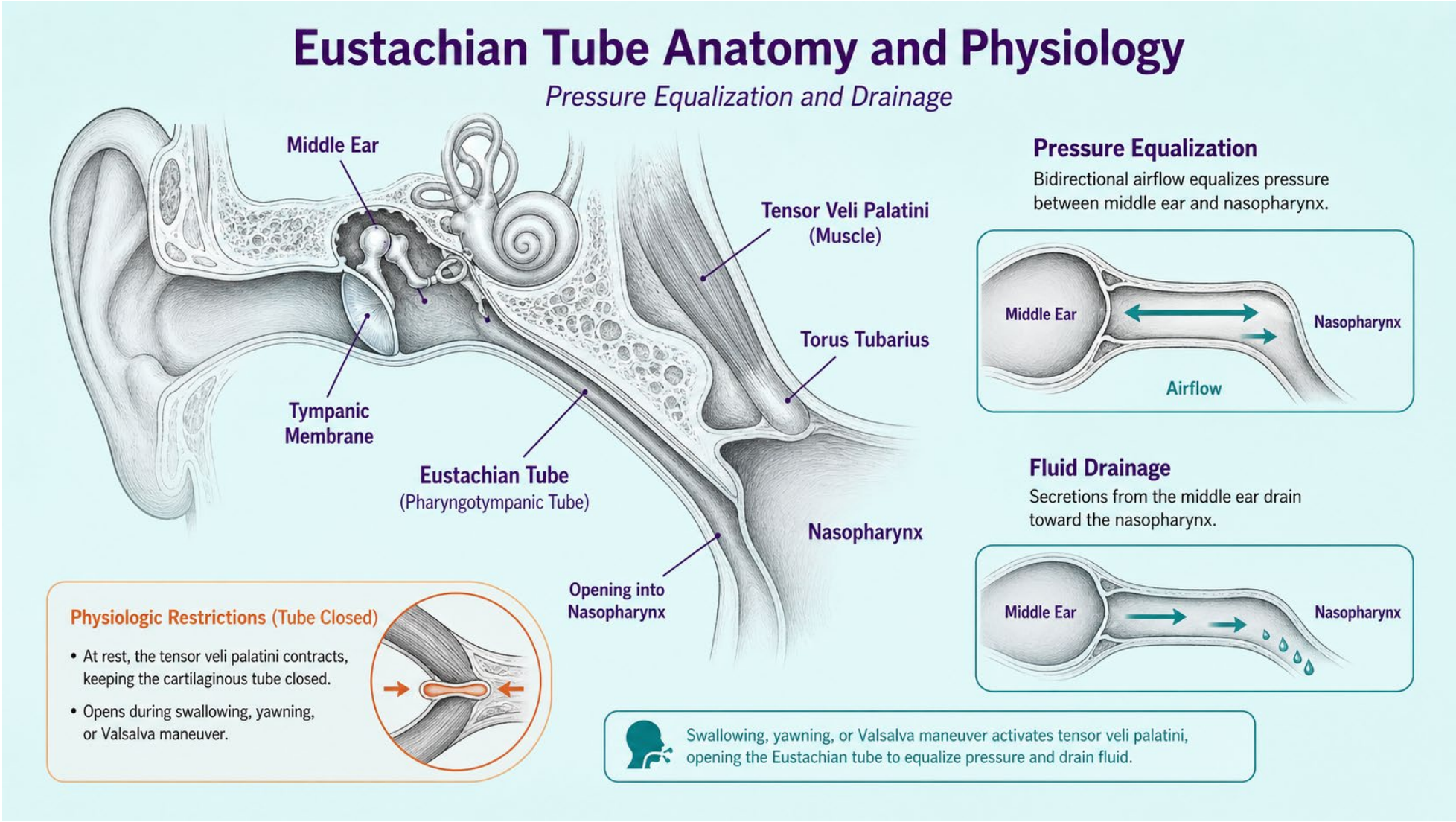


Palpation connects anatomy to physiology.

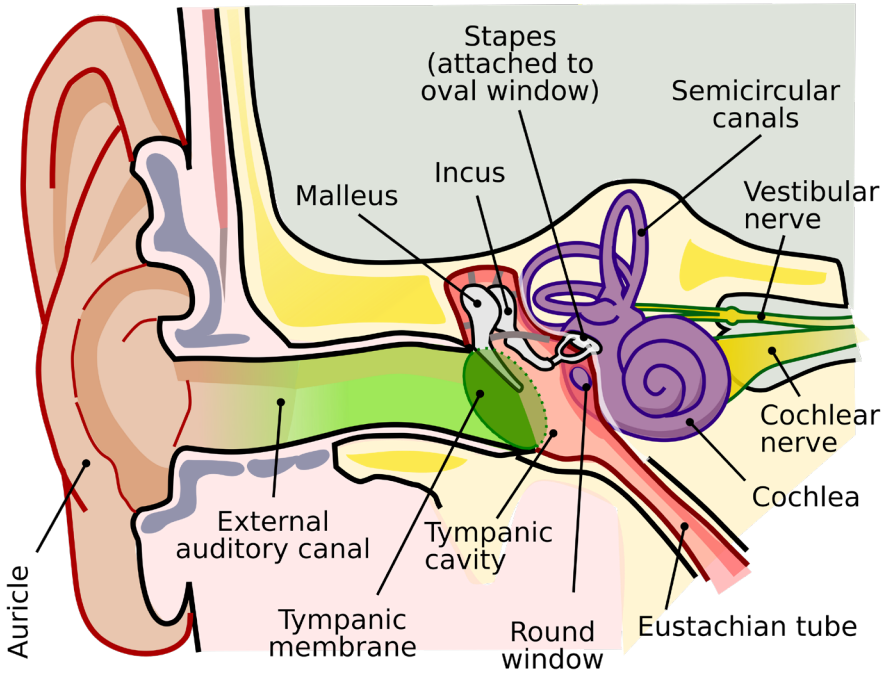
Posterior Sinuses + Cranial Mechanism Awareness



Eustachian Tube: Pressure Regulation + Drainage



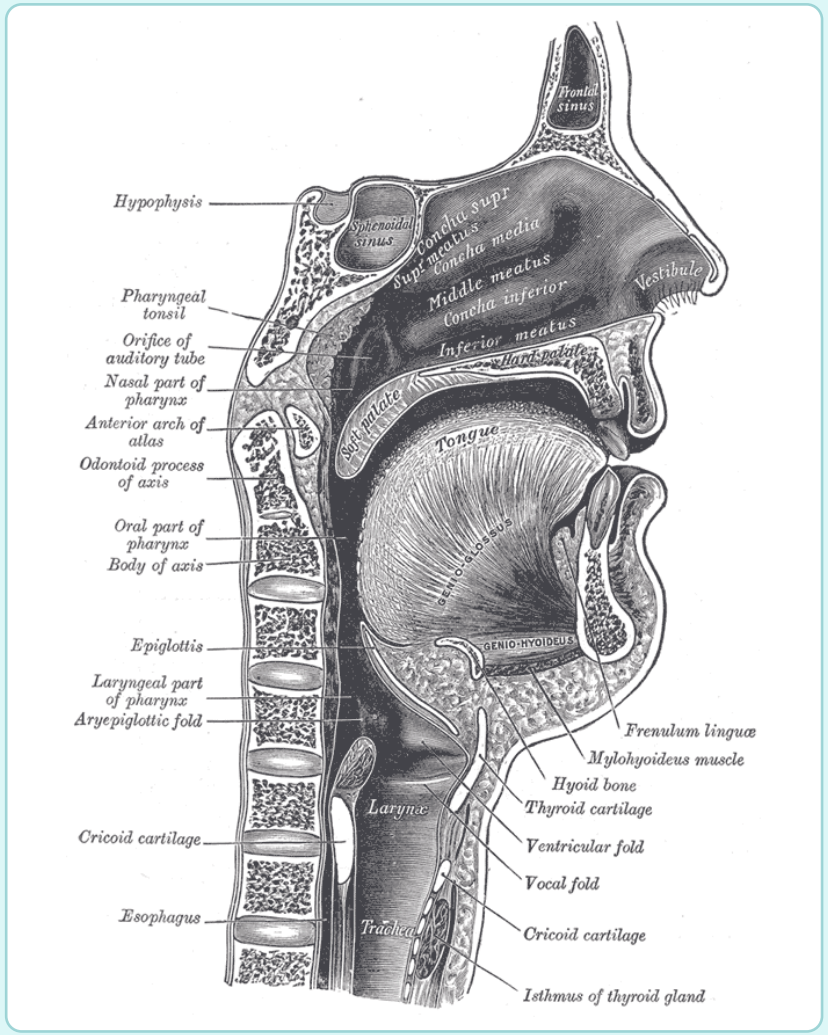
Self-Palpation: Ear, Temporal Bone, and Jaw Interface



- Notice ear fullness, pressure, or asymmetry
- Palpate around the mastoid and TMJ region gently
- Place index finger gently in ear next to external auditory canal
- Wrap rest of hand around ear and feel differences on each side in motion up-down and front-back and diagonal back
- Connect jaw/soft palate mechanics with Eustachian tube opening
- Observe how swallowing, yawning, jaw open/close and breath affect sensation

This is a pressure valve, not just a tube.

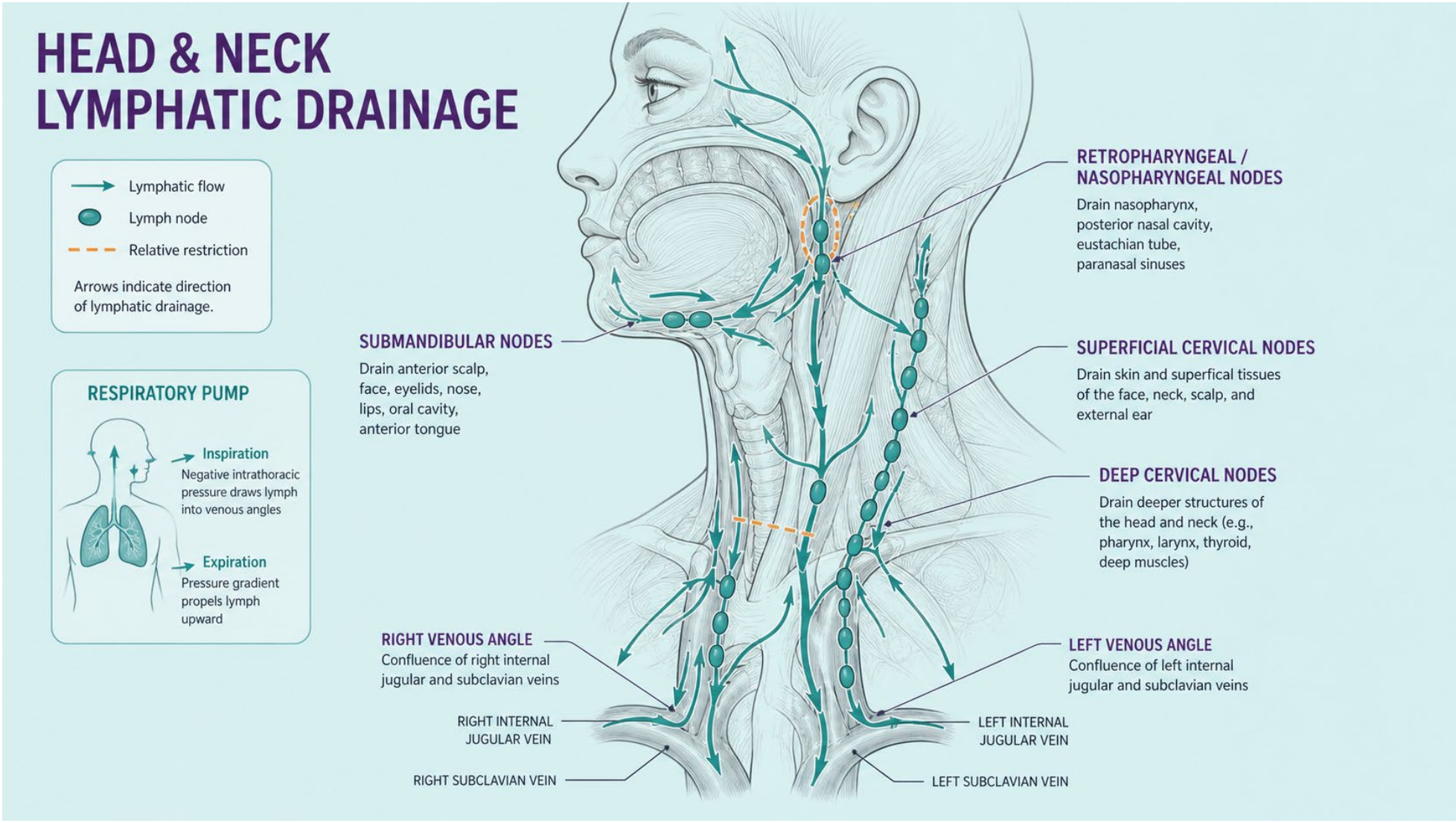
Nasopharynx: The Convergence Zone



- Receives drainage from posterior nasal cavity and Eustachian tube region
- Interfaces with lymphoid tissue and immune surveillance
- Links sinus, ear, and pharyngeal symptoms anatomically
- A congested convergence zone can amplify local symptoms

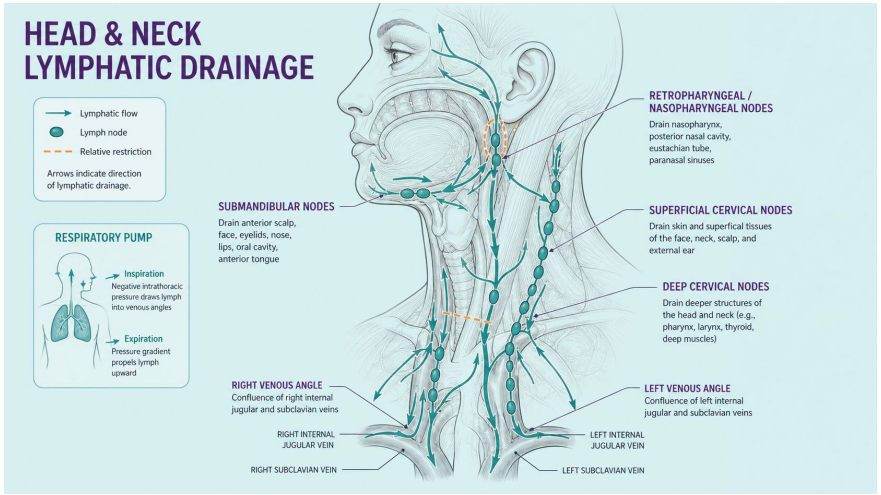
Everything funnels through here.

Head & Neck Lymphatic Drainage



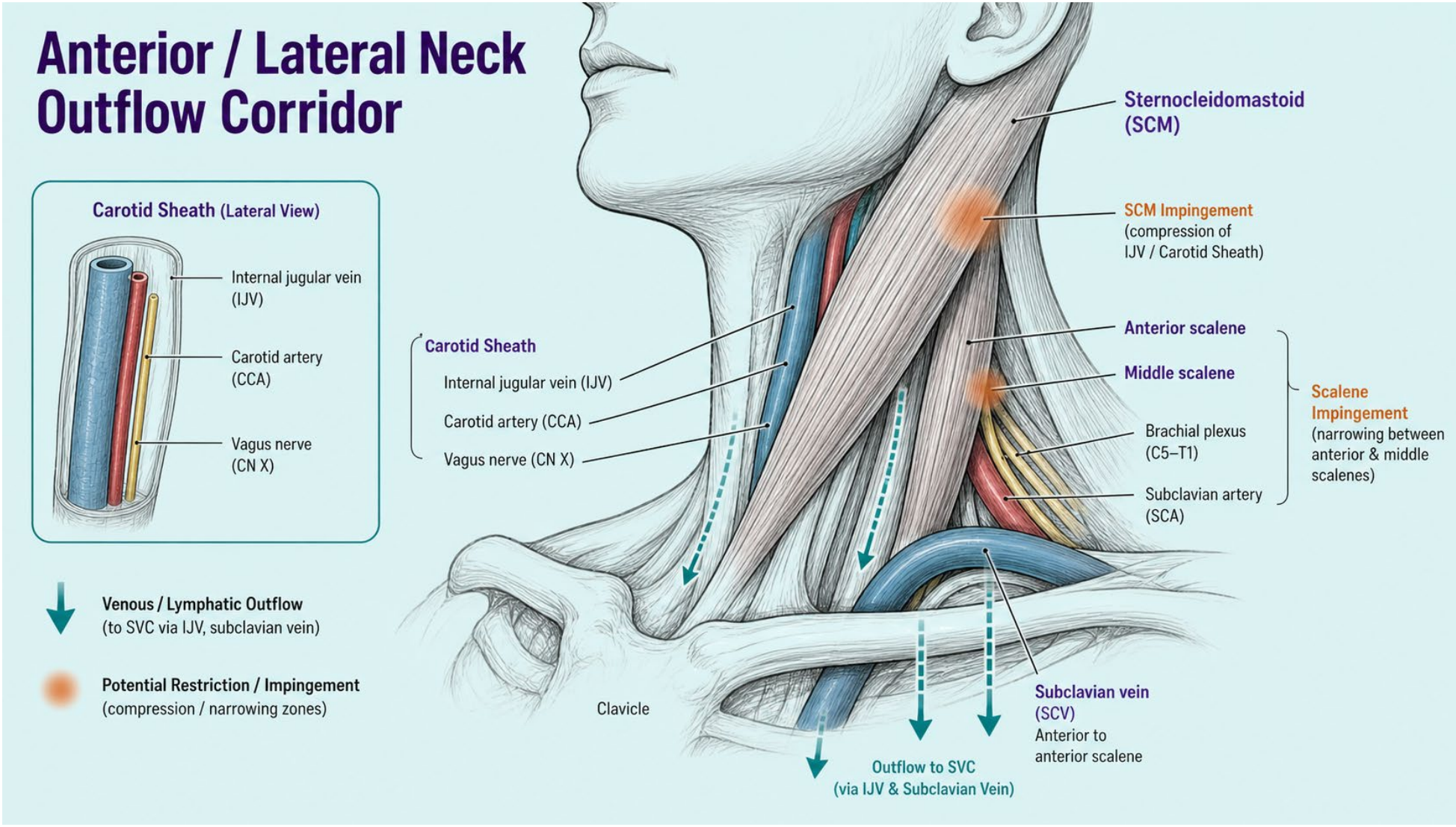
Self-Palpation: Submandibular + Anterior Cervical Lymph Flow

- Palpate gently under the mandible
- Notice density, tenderness, or “boggy” tissue
- Trace the anterior + posterior cervical chains with light contact
- Observe whether the tissues feel open, guarded, or congested
- Note differences between right and left



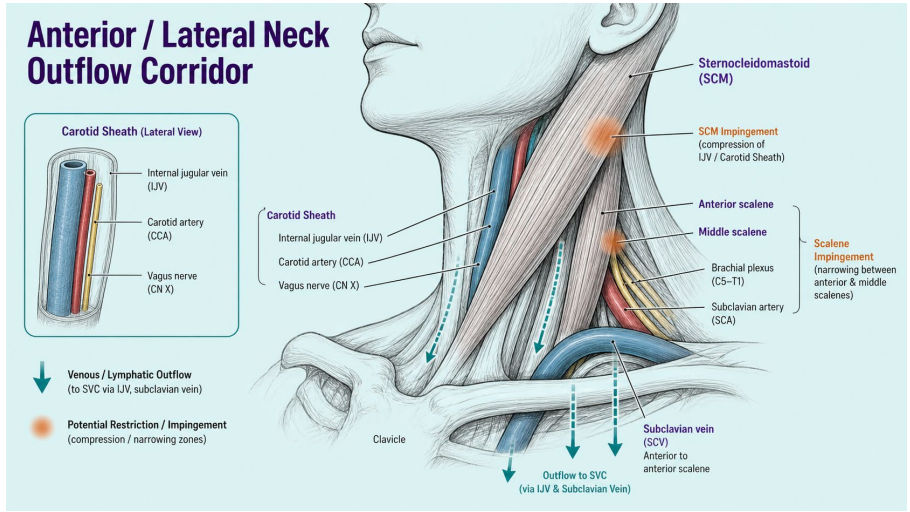
Guide the fluid. Do not force the tissue.

The Neck: Outflow Corridor and Bottleneck



Self-Palpation: SCM + Scalene Restriction Points

- SCM: turn head slightly and palpate from mastoid to clavicle
- Assess ropey tone, tenderness, and asymmetry
- Anterior, Middle + Posterior Scalenes: stay superficial, gentle, and lateral
- Connect neck tone to respiratory mechanics and outflow restriction



You cannot drain the head if the neck is closed.

The 4-System Interface

Musculoskeletal

Fascia and muscle tone can compress vessels, nerves, and drainage pathways.

Nervous

Autonomics regulate secretions, vascular tone, and tissue responsiveness.

Lymphatic

Clearance relies on motion, pressure gradients, and open downstream pathways.

Respiratory

Breathing acts as a physiologic pump for venous and lymphatic flow.

Anatomy-Based Treatment Logic

What We Assessed

- Sinus tenderness and asymmetry
- Ear pressure / Eustachian awareness
- Submandibular density
- SCM and scalene tone

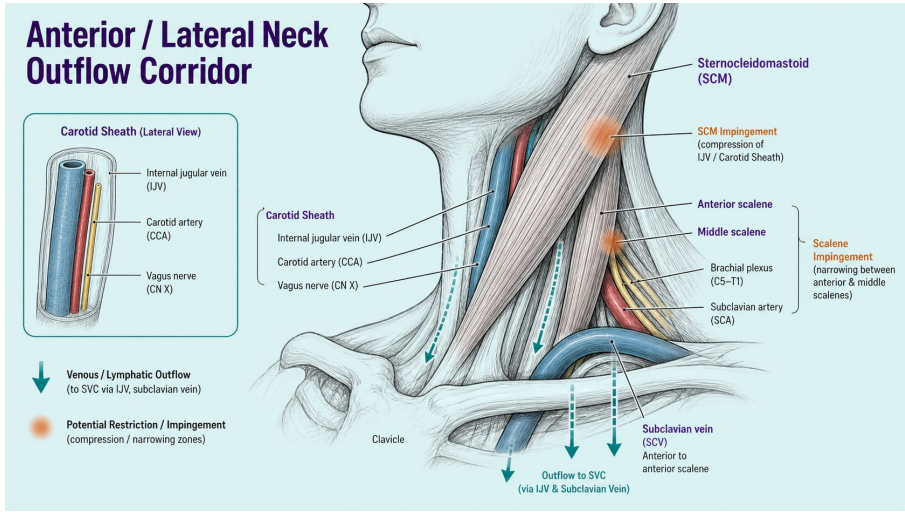
How We Treat

- Open neck outflow
- Support lymphatic drainage
- Address the local sinus region
- Reassess for change

Treatment follows physiology: open the pathway before asking the area to drain.

Partner Work: 4-Step Flow Series

- Use light contact and clear communication
- Stay superficial in the anterior and lateral neck
- Comfortable pressure only
- Reassess after each step when possible



The goal is decompression and flow, not force.

Technique 1: SCM Release

Technique details / hand position / timing:

1) Find most tender or boggy area
2) Place gentle pressure to engage that area
3) Keeping that pressure move up, down, side to side and rotate clockwise and counterclockwise towards where the tissue does not want to go
4) Keep that same pressure and position and feel the tissue gradually push you back towards the centerline
5) Gently release as you feel better circulation at that restricted area
6) Keep your fingers in that same place and feel those same motions again, seeing how the tissue is more normal there
7) Repeat in other tight or restricted area as needed

Add live demonstration notes here

Anatomy target

SCM / carotid sheath corridor

Clinical goal

Open venous and lymphatic outflow

Technique 2: Scalene Softening

Technique details / hand position / timing:

1) Find the Scalene Muscles posterior to the SCM
2) Notice any tight area on any of the 3 Scalenes and place your index and middle finger with gentle pressure on that area
3) Place your other hand on the head
4) Flex the head forward and back slowly putting slight pressure in the opposite direction with your fingers on scalene
5) Do this in a slow pumping mechanism for 1 minute or until area softens on the scalene muscle
6) Keep your fingers on the area you treated and notice the change
7) Feel surrounding tissue to see if other points on any of the 3 scalenes on either side need to also be treated

Add live demonstration notes here

Anatomy target

Anterior + middle scalenes

Clinical goal

Reduce lateral neck impingement and accessory breathing tension

Technique 3: Submandibular / Anterior Cervical Lymphatic Sweep

Technique details / hand position / timing:

1)Now place your attention on the lymphatics- anterior and posterior cervical chain
2)Using your thumb on one side of the tissue “milk” the tissue along the anterior border of the SCM, then the posterior about one minute
Add live demonstration notes here
3)Then use your index and middle fingers and do a gentle pumping motion starting just under the chin and going laterally to towards the angle of the mandible for 30-60 seconds
4)With the lymphatic restrictions now improved, use 4 fingers to gently “sweep” the lymphatic lines for one minute from the mandible, down the anterior and posterior borders of the SCM to release the main drain!

Anatomy target

Submandibular and cervical lymphatic chains

Clinical goal

Guide drainage toward open neck pathways

Technique 4: Maxillary Sinus Pump

Technique details / hand position / timing:

1) Now return to the symptomatic sinus areas (maxillary)
2) Note the tighter side may need a little more pressure to engage
3) Place your index and middle fingers on each side of the maxillary sinuses
4) Pump gently towards the nose and then in an oval motion back towards the ears beginning on either side of the nasal turbinates 10 times or until release is felt
5) Keep this gentle pressure and move laterally with this same motion two fingerbreaths over, repeat in this spot
6) Keeping the gentle pressure again move laterally a third time
7) Complete 10 or more rotations at each point until normalization and equalization of each area is felt
8) Your patient will literally breath easier!

Add live demonstration notes here

Anatomy target

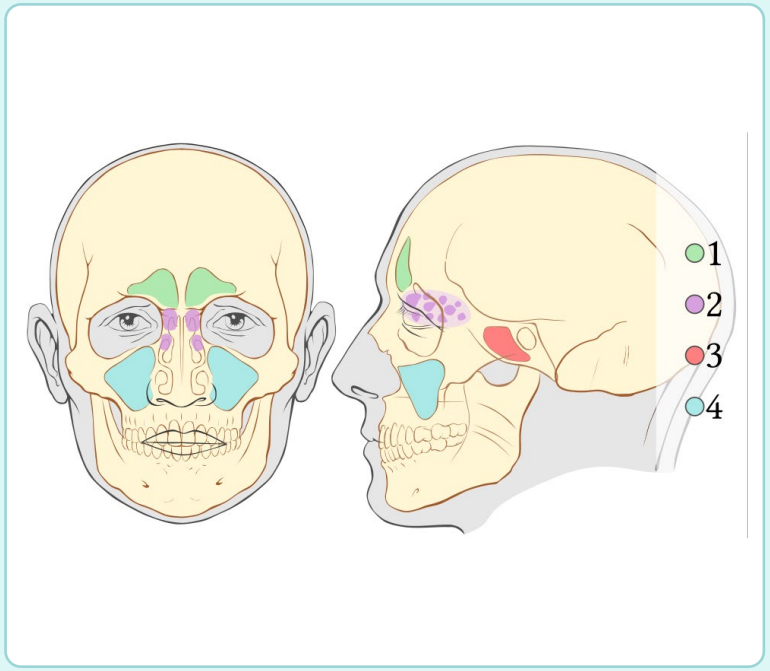
Maxillary sinus and anterior drainage pathway

Clinical goal

Improve symmetry, tenderness, and sense of flow

Reassessment: Change Confirms the Sequence

- Return to the first palpatory findings
- Check symmetry, tone, tenderness, and tissue compliance
- Ask the patient/partner what changed
- Look for improved softness, pressure, or perceived drainage



Reassessment turns a technique into clinical reasoning.

Review: Symptoms indicate Drain Problem- Assess +Tx the Drain System from Bottom back to Top

1) Assessment
2) Treatment Sequence- SCM Release, Scalene Release, Lymphatic Flow Restoration, Sinus Pump
3) Reassessment
4) Other medical workup + considering Cranial OMT as needed if recurrent symptoms to reach deeper sinus restrictions...

Persistent Symptoms: Give Patients Options

- Recommend regular sinus rinsing with warm saline when appropriate
- Consider culture: aerobic, anaerobic, and/or fungal
- Consider CT scan of the sinuses when symptoms persist
- Use anatomy-based treatment as one option within a larger clinical plan
- Recommend Osteopathic Cranial Evaluation for Deeper Sinus Congestion

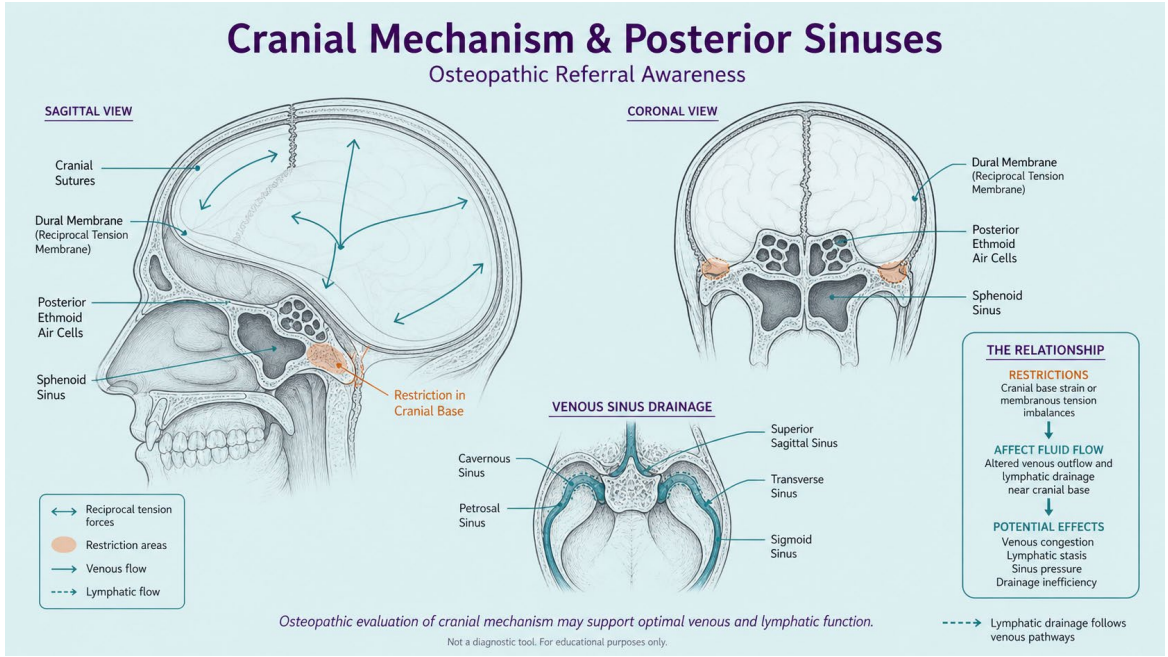
Patients deserve choices: structural, medical, and integrative.

Antibiotic Stewardship + the Microbiome

- Repeated cycles of oral antibiotics can disrupt the gut microbiome
- Antibiotic resistance patterns matter clinically
- Culture and imaging may guide more specific decisions
- Structure-function care can support the body's ongoing ability to drain, regulate, and heal
- Recommend High Dose (over 10 billion CFU) Multi-strain Probiotic post antibiotic tx for at least 1 month (beneficial longer term) if antibiotics are needed

It pays to work with the structure and function of the body.

When to Refer: Advanced Cranial Osteopathy



- Chronic sinus issues may indicate deeper cranial dysfunction
- Consider sutural restriction, membranous tension, and cranial base strain patterns
- These techniques are beyond this session's scope
- Establish a relationship with an osteopathic physician in your geographic area who practices advanced cranial osteopathy

For selected chronic patients, this can be life-changing.

Tenets of Osteopathic Medicine

1)The body is a unit; the person is a unit of body, mind, and spirit.
2)The body is capable of self-regulation, self-healing, and health maintenance.
3)Structure and function are reciprocally interrelated.
4)Rational treatment is based upon these principles.

Restore structure. Support function. Improve flow.

From congestion to flow

When we understand anatomy, palpate the system, and treat physiologic sequence, we help the body do what it is designed to do.

Questions

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