

Casual Friday Series

The Role of the Lymphatic System

A Biogenetix Clinical Presentation

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Disclaimer

- *Information in this presentation is not intended, in itself, to diagnose, treat, reverse, cure, or prevent any disease. While this presentation is based on medical literature, findings, and text, The following statements have not been evaluated by the FDA.*
- *The information provided in this presentation is for your consideration only as a practicing health care provider. Ultimately you are responsible for exercising professional judgment in the care of your own patients.*



Symptoms Associated with a Congested Lymphatic System

- - Depression
 - Digestive Issues
 - Dry, Itchy skin
 - Enlarged Lymph Nodes
 - Fluid retention
 - Food Sensitivities
 - Get sick easily
- Allergies
- Bloating
- Brain Fog
- Breast swelling
- Chronic fatigue
- Cold hands and feet
- Constipation
-
- Headaches
- Muscle or Joint pain
- Parasite Infections
- Sinus Infections
- Stiffness in the am
- Weight gain

What causes congestion to occur!

01

Sitting for long periods of time

02

Removal of Lymph nodes

03

Chronic infections

- lyme
- mold
- EBV etc

04

Wearing tight clothing

05

Consuming conventional dairy

06

Dehydration

07

Toxic exposures

- home
- work
- day to day

08

Scars and facial adhesions

- surgeries
- radiation

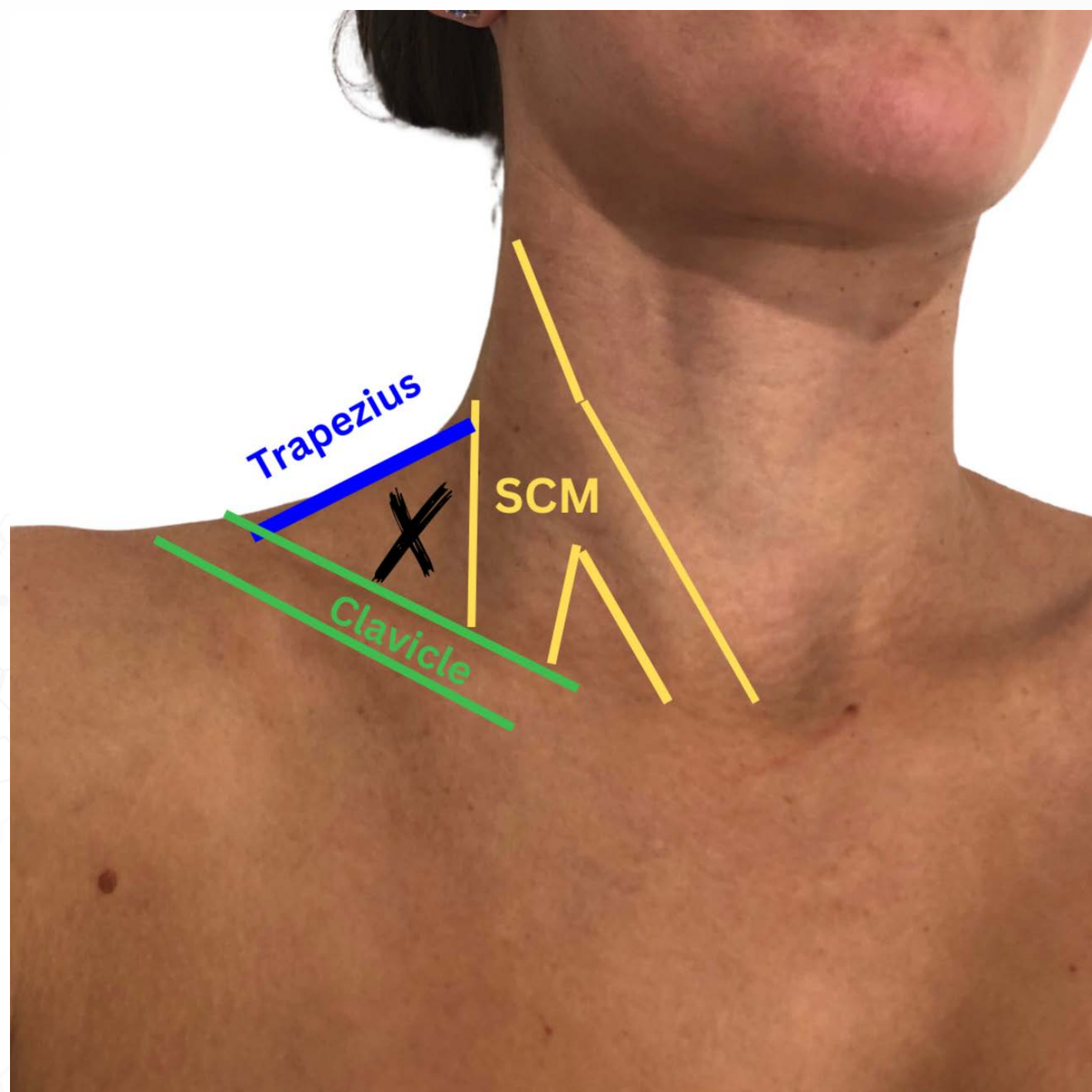
09

Other congested pathways

- liver
- gut
- kidneys
- skin
- lungs

Supraclavicular fossa

- ABOVE THE CLAVICLE
- BELOW THE TRAPEZIUS
- OUTSIDE STERNOCLEIDOMASTOID (SCM)



3 Ways To Clear The Termini

First:

Placing the pads of your ring and middle finger on the termini.

Gently pump
10-50x (1 pump per second)

3 Ways To Clear The Termini

Second:

Placing the pads of your ring and middle finger
on the termini.

Gently rub in a circular motion
10-50 seconds

3 Ways To Clear The Termini

Third:

Placing the pads of your fingers on the backside
of your traps.

With your elbows at 90 you are going to bring
your elbows towards your chest
10-50 pumps (1 pump/sec)

3 Principles



ORDER



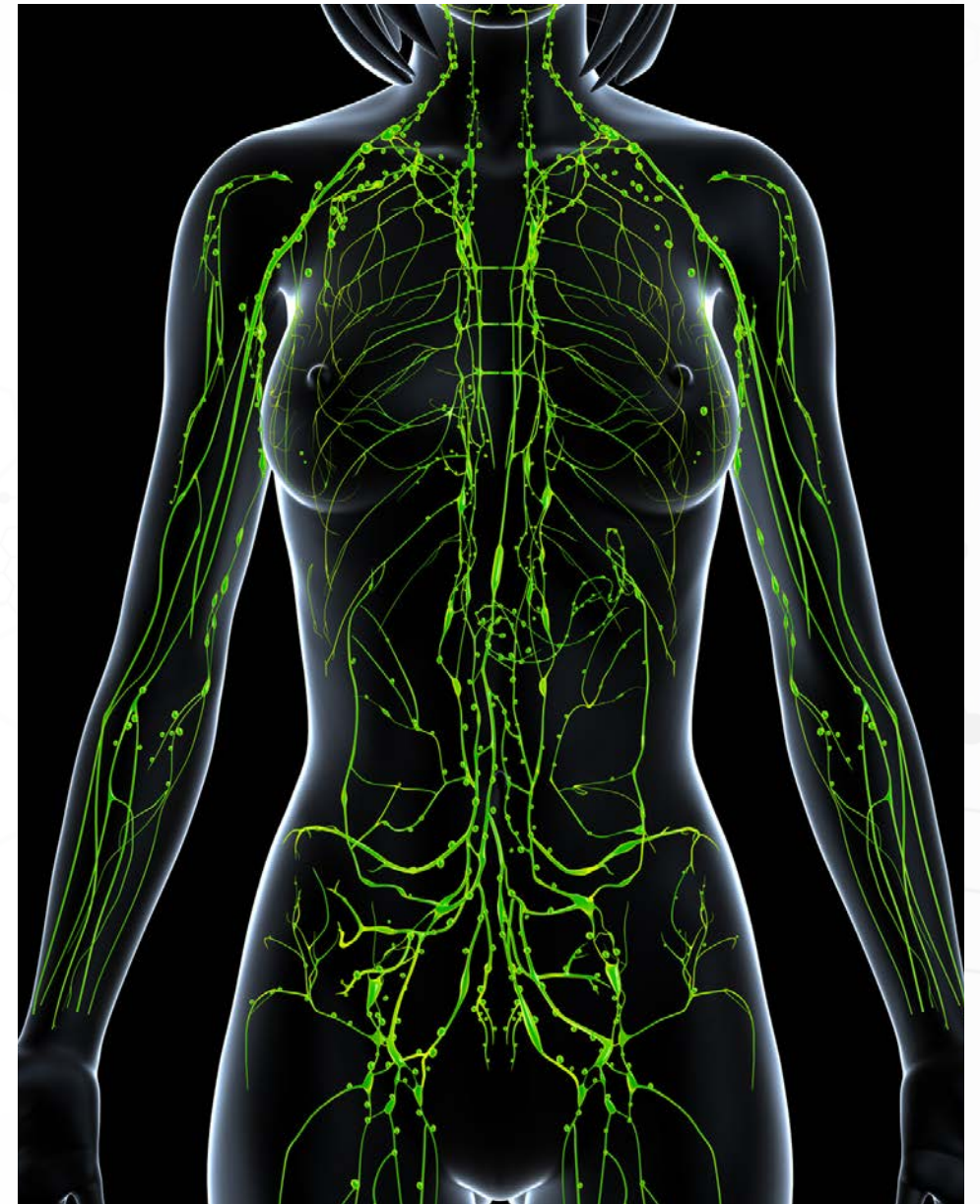
Pressure



Direction

I TRULY BELIEVE THAT THIS IS THE
REASON MOST PEOPLE DON'T SEE
OR GET RESULTS WITH LYMPHATIC
DRAINAGE.

They were never taught the 3
principles



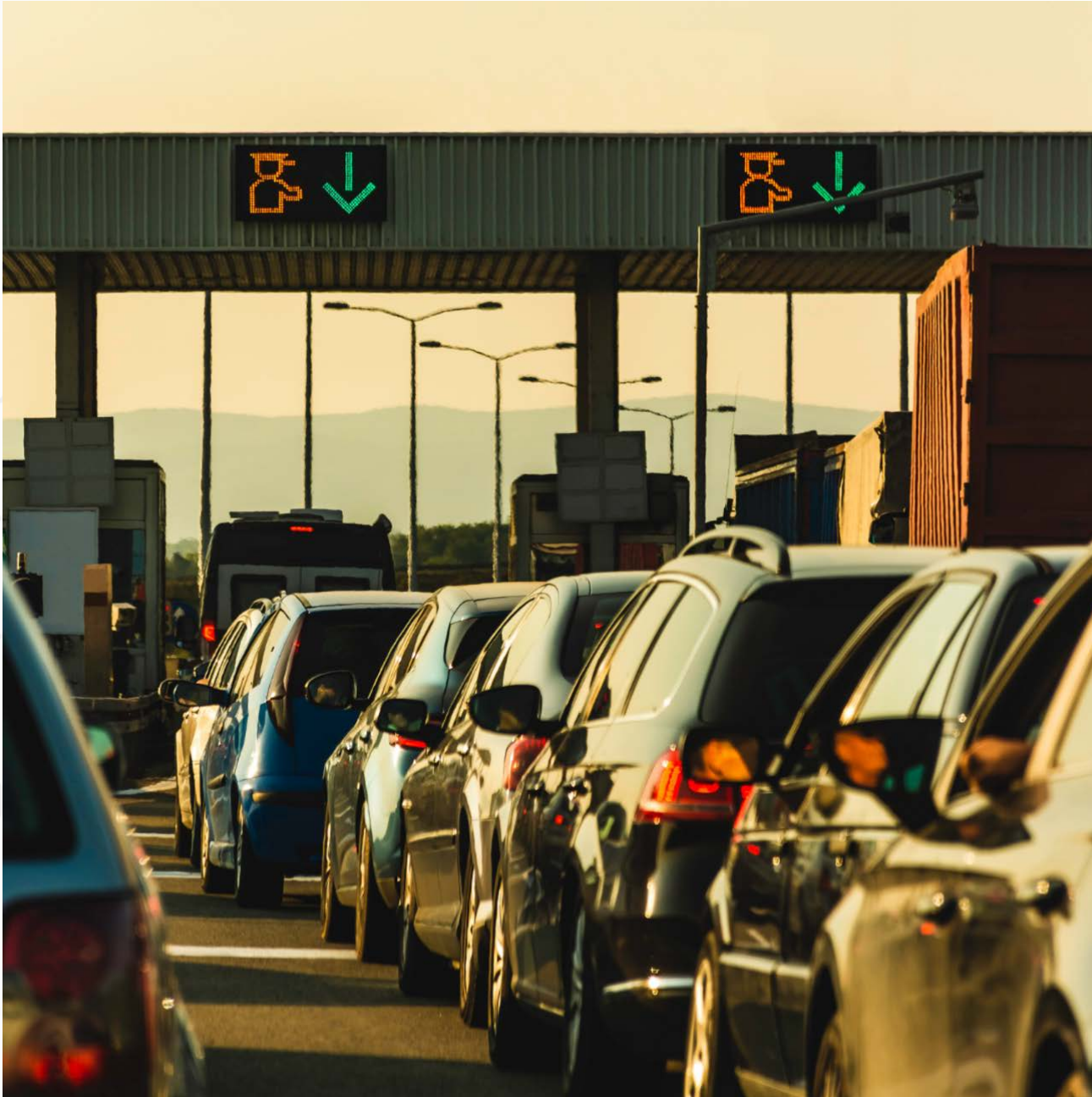
Pressure

Remember your eyeballs!

THE AMOUNT OF PRESSURE IS TOO LITTLE BECAUSE
THE LYMPH WE ARE ADDRESSING IS RIGHT BELOW
THE SURFACE OF THE SKIN (ON TOP OF THE FAT
AND MUSCLE LAYERS)

Order

**Always start with the termini!
Then move to the next closest
lymph node you are wanting to
address**

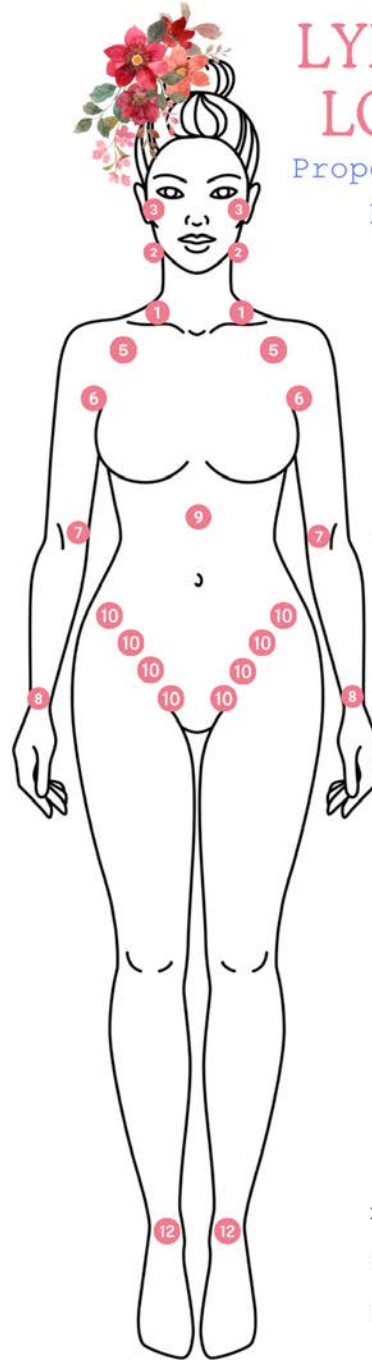


Direction... Lymphatic Drainage is like dealing with a traffic jam at a toll booth

- Toll booth is your termini
- You need to move the cars in order; meaning you cannot move the car at the back of the line first
- After you move the first car then you can move the 2nd... and so on

LYMPH NODE LOCATIONS

Proper Order for Full
Body Drainage



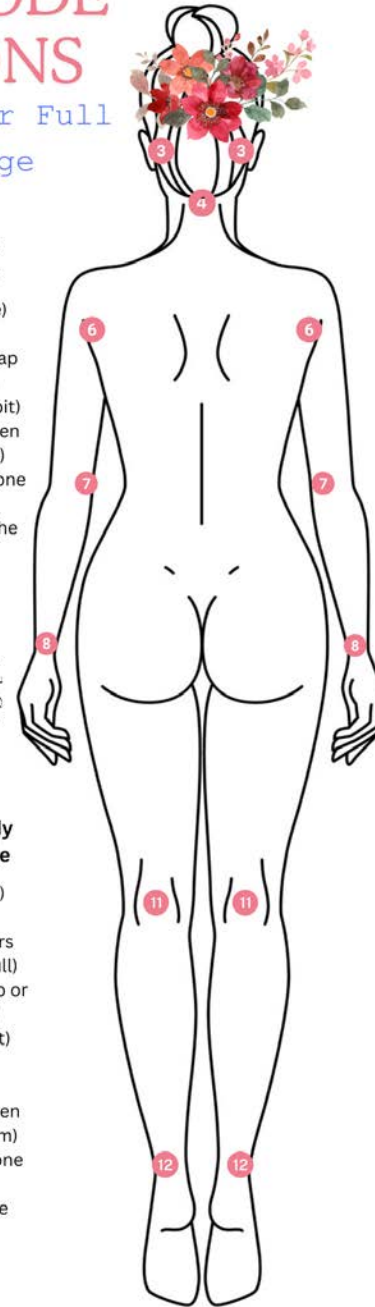
Specific 7 For Quick Lymphatic Drainage

1. Termini (collarbone)
2. Tonsillar node
5. Apical (below bra strap or inside of shoulder)
6. Axillary node (armpit)
9. Cisterna Chyli (between bellybutton & sternum)
10. Groin (inside of hip bone to pubic bone)
11. Popliteal (behind the knee)



Total 12 for Full Body Lymphatic Drainage

1. Termini (collarbone)
2. Tonsillar node
3. Front and back of ears
4. Occipital (base of skull)
5. Apical (below bra strap or inside of shoulder)
6. Axillary node (armpit)
7. Elbow
8. Wrist
9. Cisterna Chyli (between bellybutton & sternum)
10. Groin (inside of hip bone to pubic bone)
11. Popliteal (behind the knee)
12. Ankles (inside and outside)



Types of Binders

01

Activated Charcoal

Binds everything:

Toxins along with nutrients,, foods, vitamins and minerals

04

Humic / Fulvic Acid

Comes from dirt (decomposed plant material). It helps with glyphosate and doesn't bind nutrients

02

Bentonite Clay

Is a non specific binder, similar to activated charcoal.

It will still bind some nutrients but not as much as AC

05

Silica

Is known for binding to things like aluminum, tin and thalium.

03

Modified Citrus Pectin

Is a fiber that comes from citrus fruits.

Has an affinity for lead

06

Chitosan

Is a binder that comes from crustaceans.

It attracts bacteria, fungi and aflatoxins




Biogenetix™

Binder Pro

Capsules

BIOGENETIX
BLEND

UNIVERSAL TOXIN BINDER*

DIETARY SUPPLEMENT

120
CAPSULES

GMO

No Genetically
Engineered Organisms

NOTE:

Take binders at least:

- 1 hr away from food and supplements
- 2 hrs away from medications

THIS WILL HELP PREVENT THE BINDER FROM
BINDING THINGS WE NEED SO THAT THEY CAN
FOCUS ON THE TOXINS

Symptoms of Brain Congestion

- Brain Fog
- Headaches
- Sinus Infections
- Sinus Congestion
- Waking Up between 3-5 am
- Waking Up Tired
- Swollen or Puffy Face
- Double Chin
- Bags Under The Eyes

There are studies suggesting that Parkinson's, Dementia, Alzheimers and MS all have a lymphatic component

Glymphatic system clears waste products from your brain in 4 steps:

- ✓ Autophagy
- ✓ Special Nervous system cells clean up additional debris
- ✓ Glymphatic system removes the waste and cleans the cerebral spinal fluid
- ✓ Lymphatic vessels surrounding the brain move the waste into the lymphatic system to drain.

THIS PROCESS ONLY HAPPENS AT NIGHT DURING DEEP SLEEP



The glymphatic system and meningeal lymphatics of the brain: new understanding of brain clearance

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Affiliations + expand

PMID: 33618444 DOI: [10.1515/revneuro-2020-0106](https://doi.org/10.1515/revneuro-2020-0106)

The glymphatic system and meningeal lymphatics have recently been characterized. Glymphatic system is a glia-dependent system of perivascular channels, and it plays an important role in the removal of interstitial metabolic waste products. The meningeal lymphatics may be a key drainage route for cerebrospinal fluid into the peripheral blood, may contribute to inflammatory reaction and central nervous system (CNS) immune surveillance. Breakdowns and dysfunction of the glymphatic system and meningeal lymphatics play a crucial role in age-related brain changes, the pathogenesis of neurovascular and neurodegenerative diseases, as well as in brain injuries and tumors. This review discusses the relationship recently characterized meningeal lymphatic vessels with the glymphatic system, which provides perfusion of the CNS with cerebrospinal and interstitial fluids. The review also presents the results of human studies concerning both the presence of meningeal lymphatics and the glymphatic system. A new understanding of how aging, medications, sleep and wake cycles, genetic predisposition, and even body posture affect the brain drainage system has not only changed the idea of brain fluid circulation but has also contributed to an understanding of the pathology and mechanisms of neurodegenerative diseases.

Glymphatic system: an emerging therapeutic approach for neurological disorders

Ying Gao¹, Kangding Liu¹, Jie Zhu^{1 2}

Affiliations + expand

PMID: 37485040 PMCID: [PMC10359151](#) DOI: [10.3389/fnmol.2023.1138769](#)

The functions of the glymphatic system include clearance of the metabolic waste and modulation of the water transport in the brain, and it forms a brain-wide fluid network along with cerebrospinal fluid (CSF) and interstitial fluid (ISF). The glymphatic pathway consists of periarterial influx of CSF, astrocyte-mediated interchange between ISF and CSF supported by aquaporin-4 (AQP4) on the endfeet of astrocyte around the periaarterioles, and perivenous efflux of CSF. Finally, CSF is absorbed by the arachnoid granules or flows into the cervical lymphatic vessels. There is growing evidence from animal experiments that the glymphatic system dysfunction is involved in many neurological disorders, such as Alzheimer's disease, stroke, epilepsy, traumatic brain injury and meningitis. In this review, we summarize the latest progress on the glymphatic system and its driving factors, as well as changes in the glymphatic pathway in different neurological diseases. We significantly highlight the likely therapeutic approaches for glymphatic pathway in neurological diseases, and the importance of AQP4 and normal sleep architecture in this process.

Structural characterization of SLYM—a 4th meningeal membrane

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PMID: 38098084 PMCID: [PMC10722698](#) DOI: [10.1186/s12987-023-00500-w](#)

Traditionally, the meninges are described as 3 distinct layers, dura, arachnoid and pia. Yet, the classification of the connective meningeal membranes surrounding the brain is based on postmortem macroscopic examination. Ultrastructural and single cell transcriptome analyses have documented that the 3 meningeal layers can be subdivided into several distinct layers based on cellular characteristics. We here re-examined the existence of a 4th meningeal membrane, Subarachnoid Lymphatic-like Membrane or SLYM in Prox1-eGFP reporter mice. Imaging of freshly resected whole brains showed that SLYM covers the entire brain and brain stem and forms a roof shielding the subarachnoid cerebrospinal fluid (CSF)-filled cisterns and the pia-adjacent vasculature. Thus, SLYM is strategically positioned to facilitate periarterial influx of freshly produced CSF and thereby support unidirectional glymphatic CSF transport. Histological analysis showed that, in spinal cord and parts of dorsal cortex, SLYM fused with the arachnoid barrier layer, while in the basal brain stem typically formed a 1-3 cell layered membrane subdividing the subarachnoid space into two compartments. However, great care should be taken when interpreting the organization of the delicate leptomeningeal membranes in tissue sections. We show that hyperosmotic fixatives dehydrate the tissue with the risk of shrinkage and dislocation of these fragile membranes in postmortem preparations.

Glymphatic System

SUBARACHNOID LYMPHATIC LIKE
MEMBRANE (SLYM)

THIS LAYER KEEPS THE NEWLY MADE
CEREBRAL SPINAL FLUID WITHIN THE BRAIN
FROM MIXING WITH THE LYMPHATIC FLUID
(WHICH IS "DIRTY")

SLYM ALSO CONTAINS IMMUNE CELLS WHICH
THEY BELIEVE HELP IDENTIFY PATHOGENS IN
THE CSF

THIS SHOWS US THAT THERE IS SO MUCH
MORE TO LEARN ABOUT THE LYMPHATIC
SYSTEM

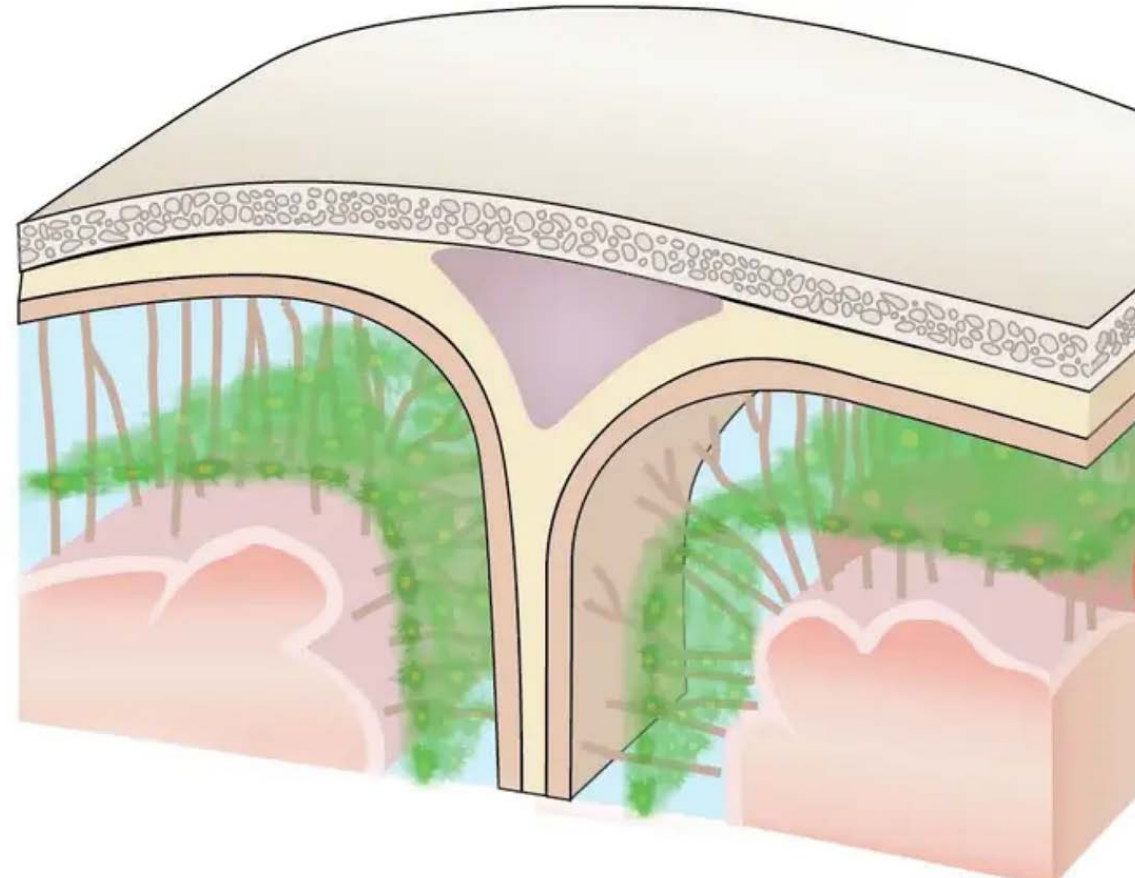
We've just discovered a new part of the brain's waste disposal system

A thin layer of tissue called the subarachnoid lymphatic-like membrane, or SLYM, keeps fresh cerebrospinal fluid separate from fluid containing waste from brain cells



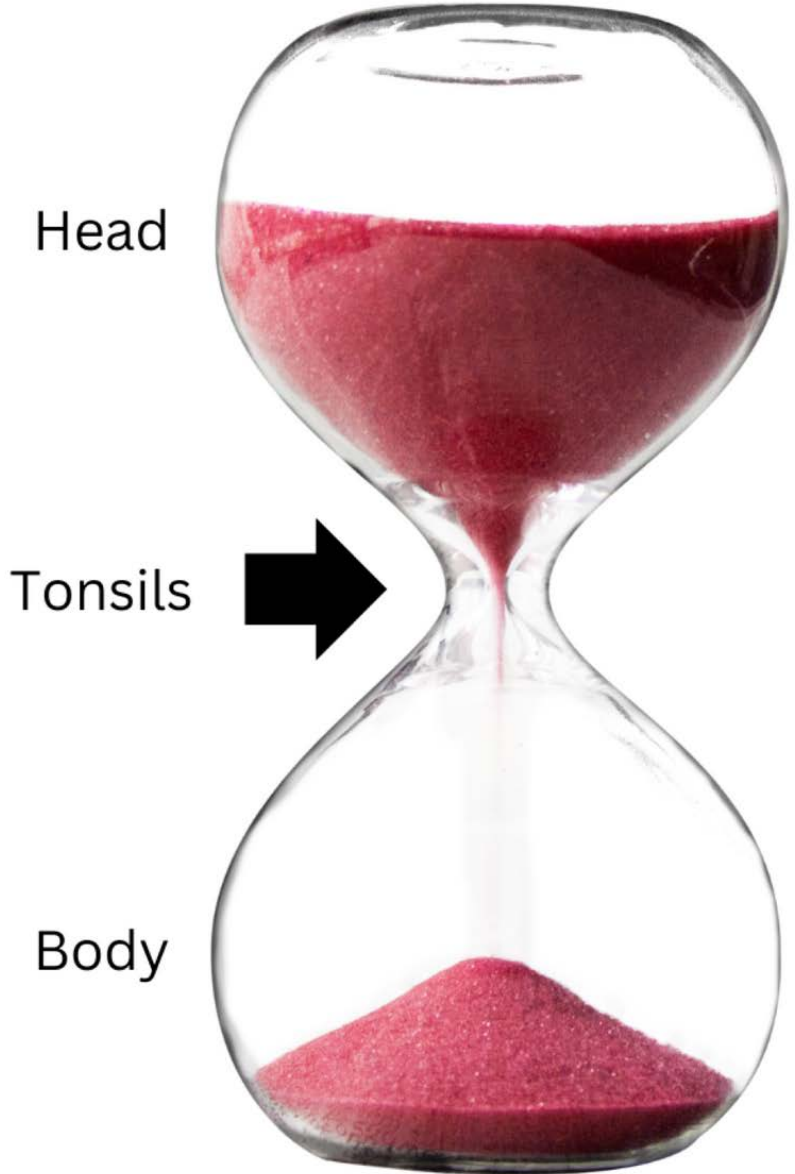
HEALTH 5 January 2023

By [Clare Wilson](#)



One thing that prevents your brain from draining

SWOLLEN OR
INFLAMED TONSILS



Tonsils and Adenoids are just big filters

THEY PREVENT PATHOGENS
FROM ENTERING YOUR
MOUTH AND NOSE

PART OF YOUR IMMUNE
RESPONSE

The background of the image is a light gray color with a pattern of faint, overlapping chemical structures. These structures consist of various polygons (hexagons, pentagons, and octagons) connected by lines, representing molecular frameworks. Some structures have small circles attached to them, likely representing atoms. The overall effect is a subtle, scientific aesthetic.

They help filter:

A I R

F O O D

W A T E R

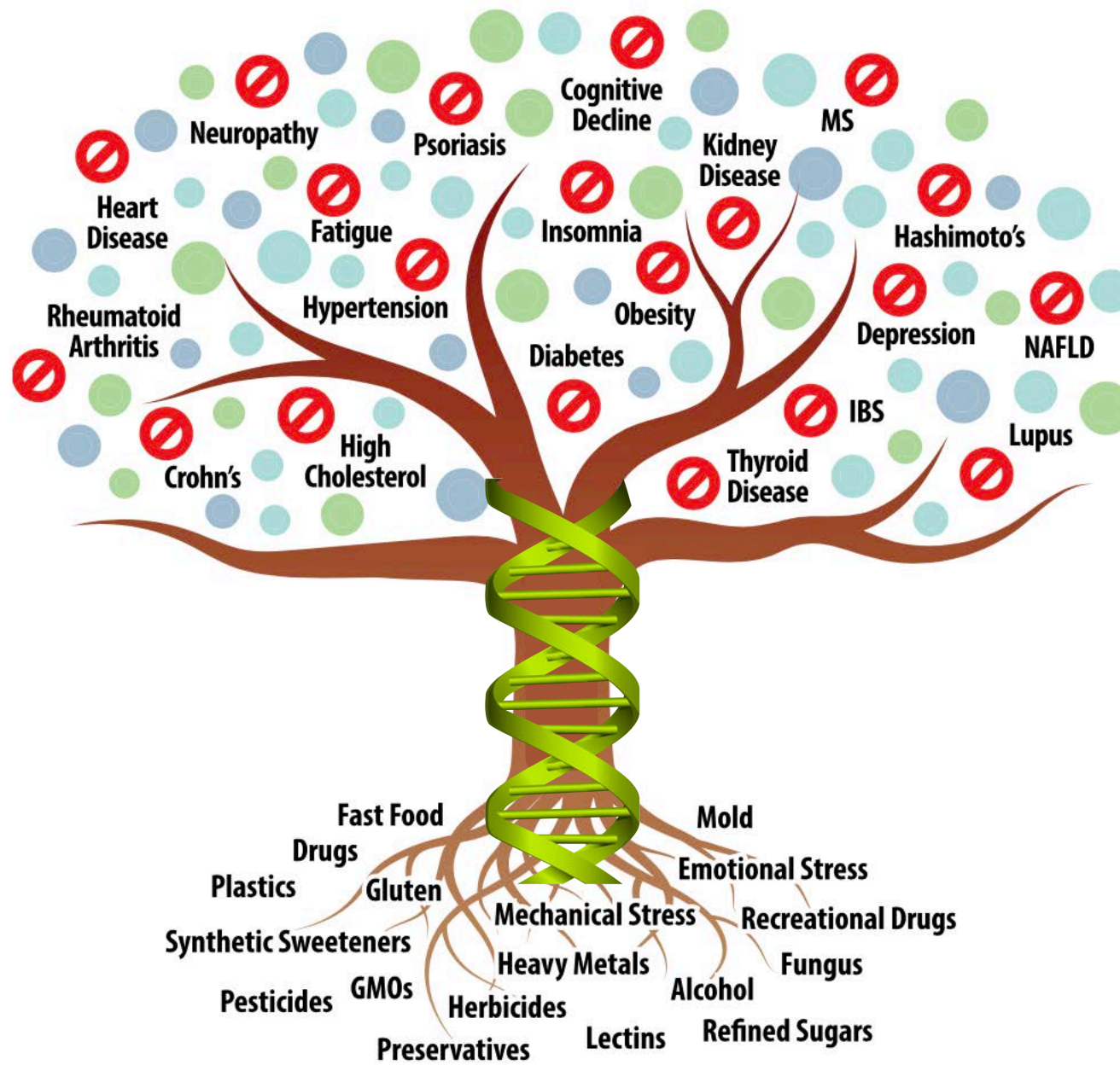
Causes of enlarged Tonsils

- CHRONIC INFECTIONS
- STAGNANT LYMPH
- FOOD SENSITIVITIES/
ALLERGIES
- MOUTH BREATHING
- SYSTEMIC INFLAMMATION
- MOLD
- PH IMBALANCE IN MOUTH

What if you had them removed?

YOU STILL NEED TO FIND THE
CAUSE OF WHY YOUR TONSILS
WERE REMOVED

AS THE PROBLEM IS STILL
THERE



How are you going to drain your Brain?

By opening up your tonsillar nodes....

Yes even if you had them removed



Locating your tonsillar nodes:

Have your head in neutral position

Located at the angle of your jaw

If it hurts when you push, you are too high



Hand Position

Going to use the pads of your ring and middle fingers.

Going to bend your fingers at your knuckles and influence the fluid towards your termini

You are stretching the skin on your neck...
not pushing in



Order

Termini: 10-50 pumps

Tonsillar: 10-50 pumps

Termini: 10-50 pumps



Casual Friday Series

Happy Draining! Have a great weekend!

For more details about drainage techniques, etc

Youtube: Doc Talks Detox



