Osteomyotropics

volume 1

Guide to identifying and fixing facial & body asymmetry



Anika W., Katarina B.

Welcome to Volume 1 of Osteomyotropics.

This marks the first edition of a new field exploring how biomechanics shape our appearance and health. Since this area of study is still evolving, we continuously refine our understanding, update our methods, and improve our approach. With each iteration, we'll uncover more insights, fine-tune techniques, and collectively expand our knowledge.

The cranium and body consist of many moving parts working in harmony. While not every technique or concept presented here needs to be applied daily, we encourage you to experiment and see what works best for you. The more consistently you integrate these methods into your routine, the better the results you may achieve.

With each new volume, our understanding will grow, and techniques will become even more efficient. While the methods in this volume are already highly effective, it's important to acknowledge that we currently lack rigorous scientific validation. Our process involves self-experimentation, observation, and feedback from others who apply these techniques. Given that traditional orthodontics and medical fields may never explore this area—since doing so could disrupt their business model—we don't expect mainstream studies on these concepts anytime soon. However, if you choose to submit your own data, we can analyze and refine our approach further.

We've encountered countless anecdotal cases demonstrating the effectiveness of these techniques and have personally experienced their benefits. Yet, there is still much to uncover. Our primary goal is not profit, but rather to help people improve their health, function, and overall well-being—not just aesthetics, but also body mechanics and psychological balance.

That said, we do rely on financial support to sustain our work. We kindly ask that you do not share these documents without permission. Treat this like any other book—discuss the concepts, but please do not distribute the contents verbatim. We strongly encourage conversations about these ideas, as biomechanics affect everyone. However, since we are among the very few actively exploring and sharing this knowledge, we must protect the integrity of this work to keep the movement growing.

Thank you for your support and understanding. If the world allowed us to live without financial constraints, we would share this knowledge freely. But as it stands, we must build this step by step. We deeply appreciate your contribution, and we hope you find this information valuable.

Enjoy, and welcome to the journey.

Disclaimer

We are not medical professionals, orthodontists, or licensed healthcare providers. The information in this document is for educational purposes only and should not be considered medical, dental, or professional advice. Any techniques, exercises, or concepts discussed are based on personal experience, observation, and anecdotal reports.

By choosing to apply any of the information presented, you acknowledge that you do so at your own risk. We are not responsible for any outcomes, injuries, or unintended effects that may result from implementing these techniques. Always consult with a qualified healthcare professional before making any changes to your health, posture, or physical practices.

This material is intended to share ideas and encourage discussion about biomechanics, but it is not a substitute for professional medical guidance. Use your discretion, and proceed responsibly.

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General Techniques for Jaw Growth

The jaw has 3 planes, vertical, horizontal, and anterior/posterior. To achieve true jaw growth, we need to expand the jaws, and therefore the skull, in these 3 planes, relatively evenly, while still taking into consideration the proportions of your face. If your face is very narrow, then perhaps you may need more lateral expansion. If your face is very wide and flat, perhaps you need more forward growth. If your maxilla is very short, then you may want to focus on forward and lateral projection. So, feel free to evaluate what you want to change in your face in regards to these 3 planes, and implement them in ratio to your face. I would start off with these exercises, to get familiar with your palate, and do them at a minimum of 5 minutes per day per exercise. This will loosen up the sutures in your skull, and over time your results will compound and accelerate, the looser these sutures and soft tissues are.

Throughout ALL of these exercises, the thumbs should mainly be positioned in the area of the palate that is higher up than the rest of the palate. This is situated roughly between the premolars. There are exceptions to this rule, but primarily this is the area we are working on.

Notes before thumbpulling:

The skull has a few main components that need to move around so that the bones can move effectively and efficiently. Based on these 3 principles, you will see much quicker results over time.

- 1) Soft tissues/muscles/fascia. These need to be relaxed and stretched out in order to make space for the bones to move AND so that the bones don't just get contracted back down.
- 2) Teeth. Teeth are the roots that connect the soft tissues to the bones. Think of them as a bridge between muscles and bones. If you move soft tissues, the teeth will move. If you move bones, the teeth will also move, but to a lesser extent. We need to help guide the muscles and bones with the movement of the teeth.
- 3) Bones. The bones of the skull are moveable, and are much more efficiently expanded if the soft tissues of the mouth, fascia surrounding the skull, and muscles of the face are stretched, relaxed and lengthened.

Begin with soft tissue stretches intraorally, particularly focusing on any tighter areas, such as lip ties, tongue ties, buccal ties, and then move on to the bigger muscles such as the muscles under the cheekbones, masseters, and the retromolar area. You will notice that stretching out these

tense areas might change your occlusion a bit. This is a good sign! You might also notice that some pleasant or not so pleasant childhood memories are resurfacing. This is also a normal part of the process.

After taking 5-10 minutes to stretch these areas out, you can begin thumbpulling with these techniques:

Lateral Expansion

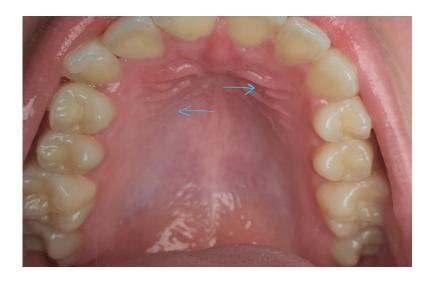
Effect:

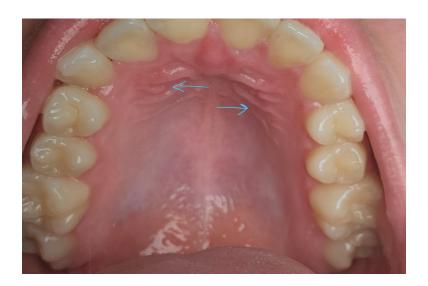
Better breathing, wider nostrils but overall smaller looking nose, wider cheekbones, wider face, more room for tongue within the palate, wider smile, wider mouth, more teeth showing when smiling, more angled upwards eyes. Tends to help overbite cases, small palates, narrow faces, small cheekbones, eye bags.

If you can fit both thumbs in the palate:



It's important to work in the area of the palate between the premolars, and to not touch teeth. If you can't fit both thumbs in next to each other, stagger them so one is in front of the other. I would like to give Jordan Wood credit to this technique, because it is absolutely genius. Highly recommend checking out his stuff on tiktok.

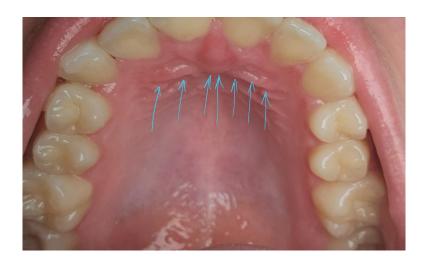




Forward expansion Effect:

Better breathing, more forward upper and lower jaw, in some cases it can narrow the palate, creates a better side profile, improves posture, improves sleep, if the jaw isn't brought forward with the maxilla it can cause overbite, more defined mid-face

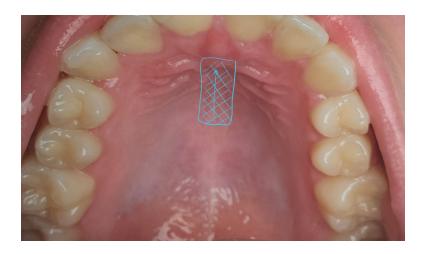
Forward expansion. This one you want to do sweeps while pressing upwards. You can start with both thumbs side by side to sweep left and right forward, then do one thumb sweeping forward in the middle on the suture.



Upwards angling of the jaws Effect:

Paired with forward expansion, you get CCW rotation of the maxilla. Lifts tip of nose up, makes top lip fuller, shortens a long midface, improves posture, helps keep face from sagging. Done too much without other techniques and bite splints, it can eventually create an open bite. Those with open bites and short maxillas should avoid this technique.

Upwards angling. With this one, you want to paste one thumb on the suture in the indicated spot on the diagram, wiggle side to side, palpate up, and then press up on exhale for a few seconds. Then repeat. You can sweep forwards too, if you prefer.



Combining all 3 techniques if your face is relatively proportional in width, angling and length. Hook your thumbs into the area indicated. It should really feel like you're hooking your thumbs in your palate. Tilt your head down, then wiggle side to side, palpate up and down, then press upwards and push diagonally at the same time. This is a quick way to get all 3 dimensions in order and can be done pretty inconspicuously throughout the day too, if needed.



Identifying Asymmetry

- 1)Take a photo of yourself with the back camera
- 2) Draw a line through the bottom of your eyes
- 3) Draw a line from the center of your forehead down so that it's completely perpendicular to the line under your eye.



This will show you which direction to tilt your head to make your eyes level, as well as which direction your jaws are going. I put arrows on the maxilla and lower jaw to show that these need to be shifted to the right a bit, for symmetry.

More often than not, asymmetrical eyes, and maxillae, are simply due to the cranium not being well supported by the lower jaw. So as the cranium tips down on one side, the lower jaw starts to shift to compensate, as do ALL of the muscles in the body. If you stack your cranium, as I show below, you might feel an inherent sense of balance, especially if you maintain that position for a bit, so that your body can adjust and balance. You can do this by jumping around in the new jaw position, and then squatting down to check how balanced you feel.

Here are a couple other examples:

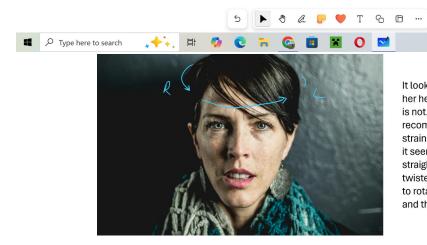


This woman has lateral strain AND torsion. You can see these lines line up almost perfectly, yet she is still asymmetrical.

That is because her left side is more forward than the right side. But despite this, you can still see things are rotated and off center.

Q 65%

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It looks like she is rotating her head, but actually she is not. This is why i recommend fixing lateral strain first, as it does make it seem like things are straight, when in reality it's twisted. She would need to rotate the left side back, and the right side forward.



This guy is pretty symmetrical, except you can see his lower jaw is laterally shifted (no forward shifting, we'll talk about that next)

So if he tilts his head to the right, he will be mostly symmetrical. But he will also need to shift his lower jaw laterally to the left to stabilize this new cranial position.



Here is a bit of a slighter case of asymmetry, but you can see that the right jaw bone is longer, when you adjust for head tilt. Imagine tilting this womans head to the left so that her eyes are level. As an exercise, what doe the rest of her face do? The maxilla and the mandible. Where would the jaw need to come in order to be center?

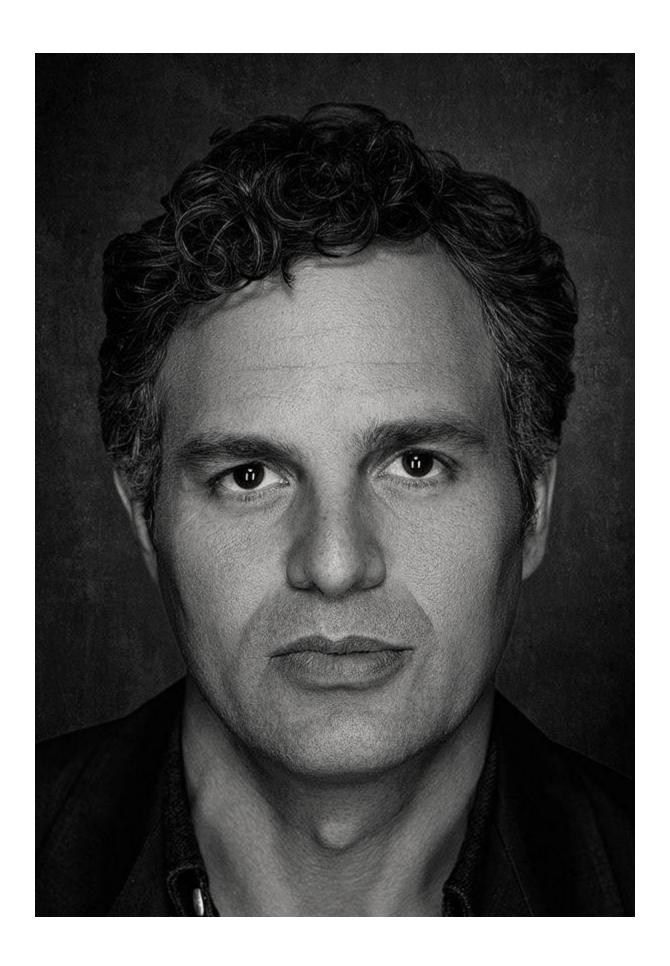
*With the above image I meant to say tilt right

Cranial Stacking Examples

Try out a few of these exercises to see how you can stack craniums. It's a very effective modality for fixing asymmetries, and the more you practice, the better you'll be able to be at identifying your own.









Solutions + fix









After a while of doing these, you'll notice that the more tilted someone's head is, (whether it be laterally, or anteriorly) the more asymmetries they tend to get. And this is solely due to muscle compensations. While cranial strains can help us identify what needs to be worked on, I think they don't consider the whole cranium as a moving object, that balances itself on the spine. In fact, I believe most people can achieve almost perfect symmetry, simply by habitually balancing their cranium upright on their neck. Then, the muscles can remodel, and symmetry is that result, of a healthy and balanced cranium.

Since Katarina and I have seen and analyzed together, probably around a thousand people, if not more, we have found that cranial strains are not the most important piece to the puzzle. Think of it like a rubiks cube. How can you solve it in the quickest and most efficient way? Yes, cranial strains help, and they are an important building block for us to see patterns within asymmetries, but as you continue reading, keep in mind this cranium stacking principle, and see if you can stack the following examples of craniums to be symmetrical. You may be surprised at the results you find, simply by rotating their head upright on their neck.

Torsion

Example



There are a couple of different sub-variations in regards to torsion, as I've witnessed in my private consults. This usually is due to variations in tension in the face, as well as a lot of the times braces will actually try and correct the torsion dentally, and end up tensing up the facial tissues in the opposite direction as what is natural for the body. Most people with torsion also have a chewing dysfunction, where they will chew on the back molars on one side, and then the premolars on the other side. This causes the temporalis to tense up on the side where the premolars are doing most of the chewing work and causes the infamous 'longer jaw' on that side.

With torsion, there are a couple of different ways to identify it. Let's do a quick quiz! Answer these questions here and tally up your points. If you have above 8 points, then you probably have torsion.

- 1) Uneven eyes. One eye will appear higher up than the other, and most of the time the eyebrow is also much higher up above the eye that's higher up. So if one eye is higher, that means that the other eye is described as 'droopier.'
- 2) Uneven cheekbones. One cheekbone is significantly smaller, but higher up on the face, while the other one 'droops' down and is typically wider, but less forward.
- 3) Maxillary cant. The side that has the more inwards cheekbone, is typically canted downwards. However, the reverse is also true sometimes.

- 4) Deviated septum. Direction of deviated septum is usually arbitrary, but torsion rarely presents without a deviated septum.
- 5) Tension in the 'smaller' side of the face under the cheekbones and in the masseters. One masseter will also be significantly shorter than the other and on the same side the ramus is also shorter.
- 6) Uneven palate. One side of the palate is always more forward, when looking at the premolars area of the palate, and one side is always wider. This creates the 'rotation' of the maxilla, as well as the cant. There is also always a side of the palate that feels lower.
- 7) Internal and external rotation of the maxilla. This shows up in the teeth, where one side of the teeth appear 'caved in' on the premolars area. This is arbitrary as to whether this presents on the narrower or wider side of the palate.
- 8) Uneven nostrils. One nostril is always pulled more upwards compared to the other.
- 9) One side of the top lip is smaller/more inwards.
- 10) One ramus is shorter
- 11) Jaw clicking on the side of the face with the wider cheekbone.
- 12) Both jaws swinging to the same side. Ie: chin swings to the left, and the teeth/maxilla also swing to the left.

If you have most of these bullet points, then you likely have torsion! The most important point here is number 12, so if you answered no to #12, then you might have something else going on.

More often than not, asymmetrical eyes, and maxillae, are simply due to the cranium not being well supported by the lower jaw. So as the cranium tips down on one side, the lower jaw starts to shift to compensate, as do ALL of the muscles in the body. If you stack your cranium, as I showed above, you might feel an inherent sense of balance, especially if you maintain that position for a bit, so that your body can adjust and balance. You can do this by jumping around in the new jaw position, and then squatting down to check how balanced you feel.

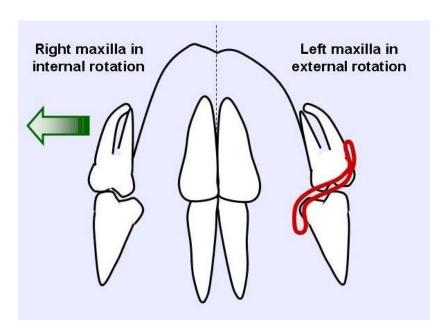
Now if you look at the previous torsion bullet points, you'll notice that you can sort of mix and match. For example, you can have your left eye be higher up, with a septum that's deviating to the left, a maxillary cant downwards to the right and internal rotation on the right side. To make it even more complicated, you can have muscle tension left over from braces or retainers, that tense the muscles in the opposite direction of the bones, and orthodontic work can also obscure the internal/external rotation as well as the palatal asymmetries. Generally speaking, however, torsion tends to present with all of these issues, and directions are mostly arbitrary. As long as you are able to stack your cranium and see exactly where the cranium is tipping, and what direction the jaws go in relation, you can see it really doesn't matter whether you have SBR or torsion, or lateral strain. Either way, the cranium needs to stack. SBR presents usually completely differently, so if all of these bullet points, maybe minus about 2 or 3, apply to you,

then you have torsion. But if only a few bullet points apply, then you would likely have SBR. Lateral strain can also mask torsion, so that's another layer of complexity to this. But your palate will still present the same as if you didn't have lateral strain + torsion. We will talk more about SBR and Lateral Strain later, though.

Remember with torsion, you do not have one side of the palate being smaller in ALL directions. Rather it is that one side is longer, narrower, and canted, while the other half of the palate is wider, more set back, and canted in the opposite direction. This is common in all torsion cases. Make sure that when you are checking, that you take a picture of your palate, and you are looking at the highest point in the palate between the premolars. There should be a line in the middle of that area of the palate in the highest point of the palate between the premolars and you will be able to see which directions in 3D each half of the palate is deficient in.

Like I said, regardless of whether you have SBR, torsion, lateral strain, or a mix, start by stacking your cranium, and see where the jaws are rotating towards when you level your eyes with the ground. This will undoubtedly show you where you need to rotate things.

Here is an example of a torsion palate:



Notice how one side of the palate is narrower, and one side is wider. The narrower side is also more forward, and the wider side is more set back. This is what creates the maxillary rotation. And it's not always the case, but external rotation is followed with the narrower side of the palate—counterintuitively.

So feel free to take a picture of your palate in good lighting and inspect visually, with your thumbs and your tongue as well, to see which side of the palate needs to widen out a bit more. Then bring the wider side forward with your thumbs, and the narrower side laterally. These are the basics, but below I will show some diagrams for how to fix it.

First, here are some general descriptions of right and left torsion. Right torsion is way more common than left torsion. I've only ever seen a few cases of left torsion, which is funny, because the PRI mostly focuses on left torsion patients, and they typically disregard right torsion patients, as they have no idea what to do with the structure of their body to straighten it out. Little do they know that a simple mouth guard would probably fix most of the facial and postural asymmetries presented in right torsion.

There are a variety of postural and gait asymmetries with torsion, but usually they boil down to this:

- 1) One shoulder is hiked
- 2) One hip is hiked

And it can be the same hip and shoulder, or the opposite. The body compensates for cranial strains and these tension patterns in the face, jaws and occlusion can show up in the rest of the body as well in the form of tension. Stretching, and massaging these areas of tension out, as well as breathing symmetrically through each lung/diaphragm can help correct a lot of body asymmetry as well. The gait (walking pattern) in people with torsion is also pretty asymmetrical, and described as 'lopsided.' Fortunately, a simple silicone mouth guard can help with this, and if you want to take it even further, you can look into PRI (Posture Restoration Institute) and see what kind of exercises they might recommend for your body pattern. We have some in this booklet here too in a different chapter. Like I said, they typically only work with left torsion patients or people with side bending rotation, so if you have right torsion, PRI basically says you're SOL. But I don't think you're SOL. More on the mouth guard later.

Right torsion:

Right side is the 'droopier' side and the left side is 'snatched.' The right side of the palate at the highest point on the palate between the premolars, will be wider, more set back, and higher up, and the left side of the palate will be narrower, longer, lower, and veering towards the right. More tissue tension in the left side of the face, particularly in the zygomatic area, as well as the masseters and temporalis.

Left torsion:

The left side is 'more developed' as it's usually described. And the right side is 'recessed.' More tension in the right side of the face, especially in the zygomatic area as well as in the masseters and temporalis. The left side of the palate in between the premolars, at the highest point on the palate, will be wider, more set back and usually higher up. The right side of the palate in the

previously mentioned area, will be longer and veering towards the right, while being narrower, and usually lower as well.

If you are confused at this point, no worries, I would be too! Here is a breakdown on how you can identify which side of the palate to work on:

- 1) Take a picture of your palate, where your eyelashes are just barely showing. Try and line up the camera to your eyelashes
- 2) Look in the premolars area, where the highest part of the palate is. Is one side longer? Is one side wider? Does one appear lower, or possibly is the palate veering towards the left or right?
- 3) Take your tongue and feel around in the palate. Which side do you have more space on? Which side is lower?
- 4) Take a picture of your face with the back camera of your phone. Look into the camera as straight as humanly possible. Then objectively determine whether one side of the face looks larger/smaller/narrower/wider/higher/droopier. Ask a trusted friend or your parents to help you with this. Tell them it's for a science experiment so that they're actually truthful and objective in their evaluation. Let them describe your face in as much detail as possible. In some instances, it will sound like they are being mean, and this is exactly what you want! Ask them questions like does my face veer to the left or right, which cheekbone is larger, etc. This part is not for the faint of heart, so if you don't want your feelings hurt a little bit, then don't do this. Also absolutely DO NOT ask a partner or a spouse to do this. Just trust me on that.
- 5) Now that you have evaluated your face and palate, try stretching the soft tissues intraorally, and see where everything is tight/inflexible. Likely, the tensest areas will also be smaller and result in a smaller half of the palate. Skip to the 'Stretches' portion of this booklet and do some of those.
- 6) Lastly, use your thumbs to feel the topography of the palate, as well as your tongue, then try some of these thumbpulling exercises in one direction, then the opposite direction. Which direction is your body screaming at you saying 'heck no' and which direction is your body saying 'ahh this makes sense!'

It's really important to cross reference what is going on in the musculature of the face, as well as the bones, teeth, palate, and prior orthodontic work. Like I said, sometimes due to orthodontic work, things get a little bit obscured, and masked. So just go piece by piece, and unravel the puzzle in a way that makes sense to your body. On the first day, you might focus on just the zygomatic areas, then the next day you might realize which palate is smaller and start working on that. Allow the puzzle to unravel itself, and try to think of it as a journey of self-discovery. You can reach out to me and think of me as sort of a guide, but you know your body better than I do, so even if I take a look at your pictures and evaluate what's your cranial strain, it is in reference to what I've seen so far, what I've read and experimented with so far. Everyone has a

unique face, with unique characteristics. Basically, trust yourself in this process, trust your body, because nobody else knows it better than you! Remember also that DIY-ing things is a lot safer than having an ortho treat you and that's in part because you can listen to your body's cues, rather than 'pushing through' your body screaming at you at the hands of an ortho. Remember also, that whatever you do in one direction, you can reverse it by doing the exact same thing in the opposite direction.

The most difficult part of cranial strains is actually determining which one you have, while the whole face and body is twisted. We are all accustomed to taking pictures at a certain angle, shifting the camera around so that we look as symmetrical as possible. This is in part because people with cranial strains quite literally see the world differently. Cranial strains can cause binocular vision disorder, vertigo, dizziness, uneven prescriptions, and just a general lack of spacial awareness. This is because the cranium is essentially sagging/tilting to one side, and the body is using it's musculature to compensate. So, if the cranium is tipping and sliding off the head, then obviously this tilts the eyes over time and causes a ton of vision issues. Our awareness of space is not what it's supposed to be. That's why you see many cases of people who wear Reviv One and all of a sudden the world seems stiller, clearer, and more colorful. Our cranium and jaws are the center.

Here is a nice way to determine which way your jaws are shifting. I personally came up with this and it seems to work on pretty much everyone, and it really clears things up for most people. Cranial strain patterns are great and all, but from my experience, they also have so many variations, it's almost impossible to keep up. It's just not the best algorithm to determine facial asymmetry in my opinion.

It's called 'Cranial Stacking'

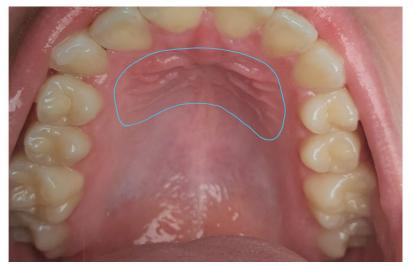
The goal really is to start from the top of the head and stack the face as straight as possible. Here's how to do it:

- 1)Go to a mirror and stand up straight.
- 2)Tilt your head so that your eyes become parallel to the ground. If you have lateral strain, you might consider also rotating the 'bulgier eye' side backwards, just to make the eyes as even as possible. If that's not possible, then don't worry about it, just make sure at least your eyes are completely parallel to the ground.
- 3) Without moving your head, swing your lower jaw, so that the center of the chin lines up with the area right in between your eyebrows. Try and make it so an imaginary line that you draw from the forehead to the chin is completely vertical, and also perpendicular to an imaginary line drawn straight across with the eyes.
- 4) Now bite down. This will lock your head in this position.
- 5) Do a big giant cheesy smile, and check which way your maxilla is rotating towards. Left or right?
- 6) Now you see the direction where both jaws need to swing towards.



You can see how rotation and tilt of the skull, along with an unbalanced and sidewinding occlusion, can cause significant asymmetries in musculature. The second pic is me stacking my cranium, although I rotated it a bit too far backwards on one side. It usually helps to straighten your posture out. But this just goes to show that asymmetry, is simply the head not balancing well on the neck. Now imagine if I held the left photo as my natural position for over 16 years, what would happen to my teeth, bones, jaws, neurology, cervical spine, spine, etc. Our parents weren't wrong when they said if we frown too much, we might get stuck like that! Haha. And imagine what happens with jaw surgery! How do they even determine what is straight, where is vertical and horizontal, when someone is as twisted as for example I was (and still am somewhat, lol).

I have read the studies on jaw surgery. These surgeons barely have a clue where center is themselves. However, you can determine it by how you take photos of yourself, and how you contort your body for that kind of thing to make yourself look attractive. That's another hint, for how you can figure out how this all works. Another will be neck traction later.

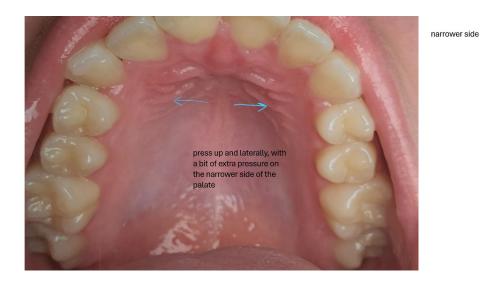


This area is mostly where we will be working. So, mostly this ridged area of the palate. NOT touching teeth, and working as close to the suture as possible, which is the very middle where you see that line up top on the roof.

The area between the premolars is where the palate starts to rise upwards. Start with your tongue behind the front teeth and slide it backwards slowly. Feel where the palate raises upwards. This is the spot!

Asymmetrical Expansion

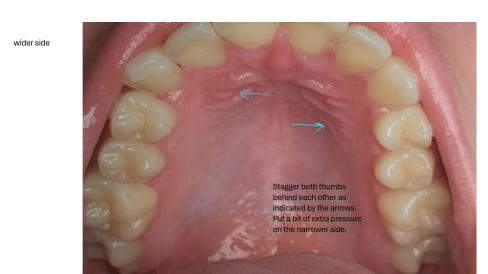
wider side



Expanding the palate helps expand the airways, widen the face, decrease nasolabial folds, expand the cheekbones laterally, widen the mouth, and widen the smile to reduce buccal corridors.

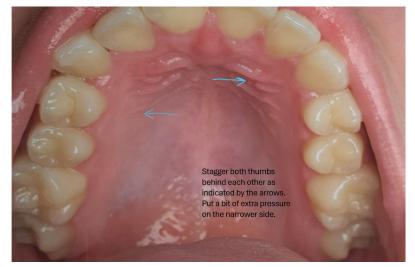
Asymmetrical Expansion Modified

This one is if you can't fit both thumbs between your premolars.



narrower side

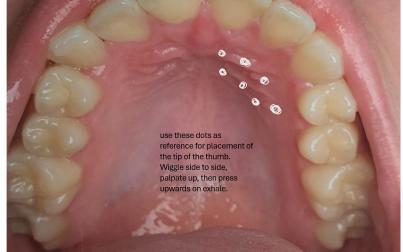
wider side



narrower side

After a month or two of doing these exercises you should be able to transition to being able to fit both thumbs in the palate for lateral expansion.

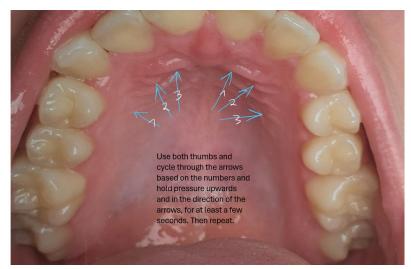
Canted/lower side higher up side



The primary function of this is to help correct the maxillary cant, as well as to shorten the midface, bring the tip of the nose up and make the top lip fuller.

narrower side





Forward growth needs to be leveled out with both sides of the face. So the wider side of the palate needs to be grown forward a bit more than the narrower side of the palate, as the narrower side of the palate is ahead in terms of forward growth. For a modified version, anchor down on one side, as shown in the modified lateral expansion diagram, and then cycle through the numbers on one side of the palate, then switch.

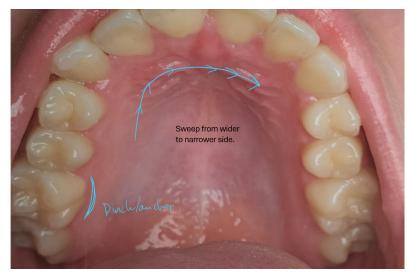
Palatal Sweeps

This one is generally a hard one for people to determine, because orthodontic work tends to obscure this asymmetry a bit in terms of the teeth. A lot of the times, while the teeth are being pulled to the center, the jaws themselves still are shifting away from the center, and the muscles in this process are tensing up in varying directions that are physiologically normal for torsion. Sometimes even the palate is symmetrical looking, yet torsion still presents in the muscles and bones of the face. To determine the correct direction for sweeping, take into account where the chin is veering towards, and assuming that you have torsion, then sweep in the direction away from the chin.

The goal is to bring the maxilla back to center with this. So if you're lucky, then your teeth, maxilla, and lower jaw, all are veering towards the same direction. In which case, it's easy for you and you can sweep in the opposite direction to bring it back to center.

narrower side





Do this at medium pressure, and slowly but surely. You want to imagine that your maxilla is rotating from left/right to back to center. If your body is saying 'what the heck, this doesn't feel right' then try sweeping in the opposite direction.

Forward growth has to be accompanied with upward angling of the jaws, otherwise, the jaws will just lengthen, but at a strange angle. The maxilla needs to grow upwards, in order to be beautiful. The 3 dimensions are:

Lateral expansion (X-plane)

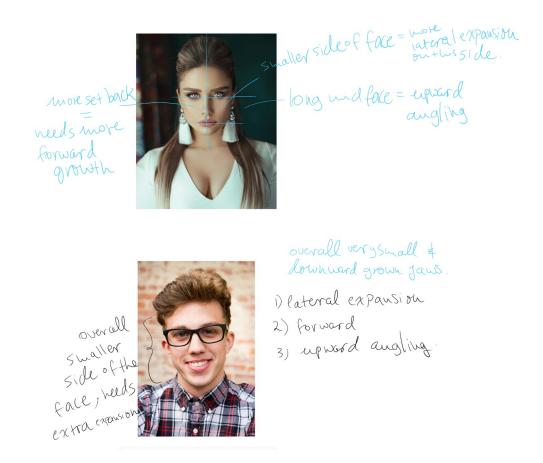
Forward expansion (Z-plane)

Upward angling (Y-plane)

With equal expansion of these 3 planes, your face will begin to balance, BUT we need to also consider how each half of the palate is working in terms of these 3 dimensions.

The narrower side of the palate is deficient in the x-plane, and the y-plane usually. The wider side of the palate is usually deficient in the z-plane and occasionally the y-plane. We have to think about these 3 dimensions in relation to each half of the palate, but we also have to zoom out and look at it in terms of the proportions of the face. So if your face is long, then you might want to focus more on the y-plane, in BOTH dimensions, ie angling the jaws upwards. If your face is narrow, then you can focus on the x-plane in BOTH directions ie. lateral expansion. If your face is short and flat, then you might want to consider expanding forward more and neglecting upward angling. Keep all of these things in mind while you are thumbpulling, and adjust the time spent on each dimension as necessary.

Here are a couple of examples:



Anyways, the point really isn't to end up looking like Kate Moss, IMO. It sure is a plus that down the road we can look forward to that, but getting too far into analyzing appearances, really can tear down one's self esteem. So we should focus more on tracking improvement, increasing functionality of our senses and biomechanics, rather than dissecting facial features.



Babies are a great example of people who have short midfaces! If you have a short midface, make sure not to do upward angling of the jaws, and instead focus more on forward growth on it's own, and evening out the palate in 3D.

Side bending Rotation (SBR)

Bone Displacement:

The **sphenoid and occiput rotate in the same direction around an anteroposterior axis**, but also bend laterally in opposite directions around two vertical axes.

The convex side appears broader, while the concave side appears compressed.

Facial Reflection:

Side profiles are significantly different.

One side of the face appears wider and more prominent (convex side).

The opposite side (concave) appears **narrow and compressed**.

Eyebrows and orbits are misaligned, but in a distinct **side-bending pattern**. One eye appears bigger and the other eye more defined and set deeper.

Cheekbones reflect the bending—one is prominent, the other is flat.

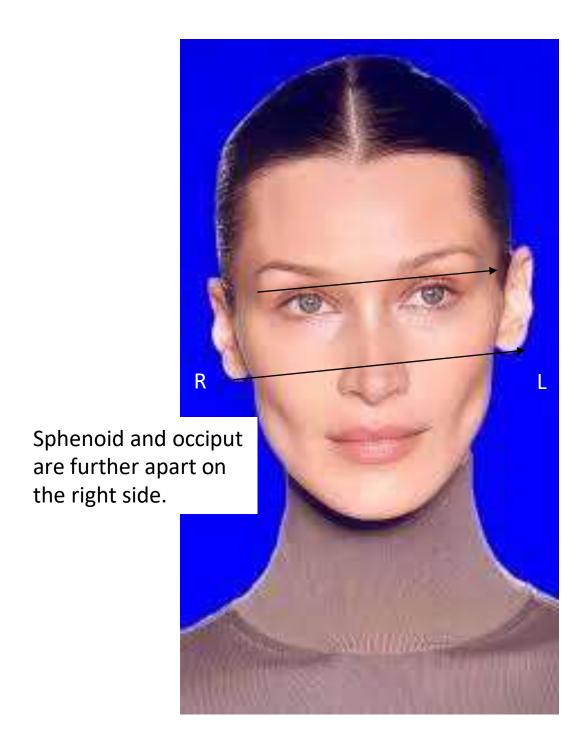
Facial Reflection:

Side profiles are significantly different.

One side of the face appears **wider and more prominent** (convex side). The opposite side (concave) appears **narrow and compressed**.

Eyebrows and orbits are misaligned, but in a distinct **side-bending pattern**. One eye appears bigger and the other eye more defined and set deeper.

Eye and ears follow the same rotation; eye and ear on the same side are lower. Cheekbones reflect the bending—one is prominent, the other is flat.





Maxillary Changes:

The maxilla follows the convexity, appearing slightly broader on that side. The dental arch may expand or constrict asymmetrically.

Occlusion is affected, leading to bite discrepancies. May contribute to unilateral posterior crossbite.

Indicators for Identification:

One cheek appears wider, the other narrower. Mandibular deviation toward the compressed side. Asymmetrical nasal alignment. The head may appear slightly tilted at rest.

Right TMCC

The dysfunction originates on the right side of the jaw, specifically the right TMJ.

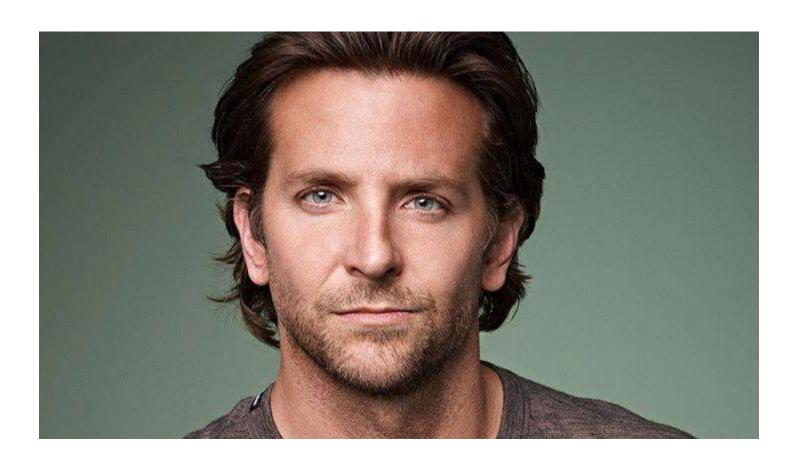
Body compensates by shifting the facial structure toward the opposite (left) side Right side is compressed, rotated internally.

Right temporal bone and jaw rotate internally.

Left side is wider or stretched due to the compensatory action of the muscles and tissues on the left side.

The overall shift of the face is toward the left, but it's a compensatory reaction to the right-sided issue.

2 variations.



Right TMCC

Feature	Left Side (Externally Rotated)	Right Side (Internally Rotated)
Cheekbone	Flared outward	Flattened, compressed inward
Ear Position	Flared outward	Closer to the head
Jaw Alignment	Shifted left	Compressed, restricted mobility
Overall Skull Shape	Opened and widened on the left	Narrow and tighter on the right



1. Left masseter overactive (typical)

Overdevelopment or tension in the left facial muscles

Left side wider and fuller

Hypertrophy of left muscles (muscle thickening)

Depending on the rotational mechanics, left side might be more prominent or on the contrary pulled backward

Right side flat, narrow, less defined cheekbones and jawline

Hypertrophy of the left masseter adds to the externally rotated look on the left side.

2. Right masseter overactive (Atypical)

Body is trying to stabilize the compressed right TMJ

Body limits further moveemnt on the right TMJ by tightening the muscles

Right side tighter, tense, right cheekbone and jawline more pronounced

Left side less defined, relaxed, externally rotated

Right side internally rotated

Left side externally rotates to counterbalance internal rotation of the right side.

Constants:

Tightness or compression: the more active side is often tighter or narrower

Rotation or shift: the opposite side may compensate by externaly rotating or shifting forward Facial width: the less active side often appears wider, while the more active side appears narrower Left side will always be externally rotated.

The first action dictates the whole pattern

In the **right TMCC** the right side rotates internally first due to cranial compression, causing the right side of the face to appear narrowe and compressed.

As a compensations for the internal rotation of the right side, left side rotates externally, causing left side of the face to become wider.

In the **left torsion** left side rotates outward first and then the right side compensates by rotationg inward.

Right TMCC vs. Left Torsion

RIGHT TMCC

- The dysfunction originates on the right side of the jaw, specifically the right TMJ.
- Body compensates by shifting the facial structure toward the opposite (left) side
- Right side is compressed, rotated internally.
- Right temporal bone and jaw rotate internally.
- Left side is wider or stretched due to the compensatory action of the muscles and tissues on the left side.
- The overall shift of the face is toward the left, but it's a compensatory reaction to the right-sided issue.
- 2 variations.

LEFT TORSION

- The dysfunction is on the left side of the face, typically related to the left TMJ.
- Face is twisted or rotated to the left due to abnormal position or movement of the jaw on the left side.
- Left side appears more pronounced and the right side more contracted.
- Left side of the face looks pulled forward, and the right side of the face looks more retracted or pulled backward due to the direct misalignment happening on the left side of the jaw.
- More rotation or twisting to the left, which is not just a shift, but a structural change.

Lateral Strain





Let's talk about lateral strain and torsion. I have seen lateral strain and torsion present together quite a bit, and it seems to be pretty common, from what I can tell. About 1 out of every 4 people with torsion also have lateral strain to some degree. The most confusing aspect of it, is that in some cases, even despite the palate being smaller on one side, the face is still much fuller on the same side, and the wider side of the palate presents with a slimmer face. Vice versa can be true though, as well, so the wider palate can have a fuller face, and the narrower side of the palate can have a slimmer face. Either way, you want to make sure that you're taking face fullness into account. Here is how you can tell if you have lateral strain:

- 1) One side of the face is much fuller in the cheeks, eye area, forehead, cheekbone, etc. and on that same side, you have an ear sticking out.
- 2) The other side of the face appears set back and overall either smaller, or just slimmer. The ear on this side is sometimes hidden, or just normal looking.

I would fix lateral strain first, as usually it takes about 1-4 weeks depending on flexibility of the fascia and consistency. The goal is to make the ears 'stick out' the same, and have each side of the face in the cheekbone area be roughly balanced. One of the eyes also tend to bulge a bit with this, and this gradually goes way with fixing lateral strain.

Here is how to fix it:

- 1) Take the hand with the fuller side of the face and place it on your forehead
- 2) Take the hand with the slimmer side of the face and place it on the back of your head, directly opposite and parallel.
- 3) Rotate the top of the head with the fuller side rotating back, and the slimmer side rotating forward. This will either be a clockwise or counterclockwise rotation with both hands rotating in the same direction.
- 4) Do this for a few minutes per day, every day, and watch your face become a lot more harmonized.





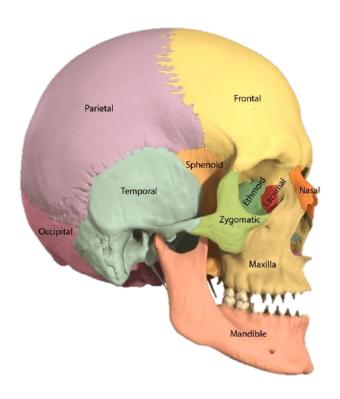
Remember to rotate the fuller side of the face back and the slimmer side forwards. What it really does is help stretch and train the muscles of the head, neck and back, to sit center, instead of one side rotating forwards. Lateral strain is the habitual turn of the head to one side, and usually presents with more forward head posture on the fuller side of the face as well. The muscles in lateral strain are so tense, that it creates almost a completely different face on one profile, vs the other. Usually, the curve of spee is also more flat on one side, compared to the other side.

Suture Traction Therapy

Initiates innate ability of body to realign facial bones and self correct facial asymmetry.

Relaxes sutures between:

- 1. Frontal and parietal bone
- 2. Frontal and maxillary bone
- 3. Frontal and sphenoid
- 4. Frontal and zygomatic
- 5. Parietal and parietal
- 6. Parietal and sphenoid
- 7. Parietal and temporal
- 8. Parrietal and occipital
- 9. Occipital and temporal
- 10. Sphenoid and temporal
- 11. Sphenoid and zygomatic
- 12. Zygomatic and temporal
- 13. Zygomatic and maxillary

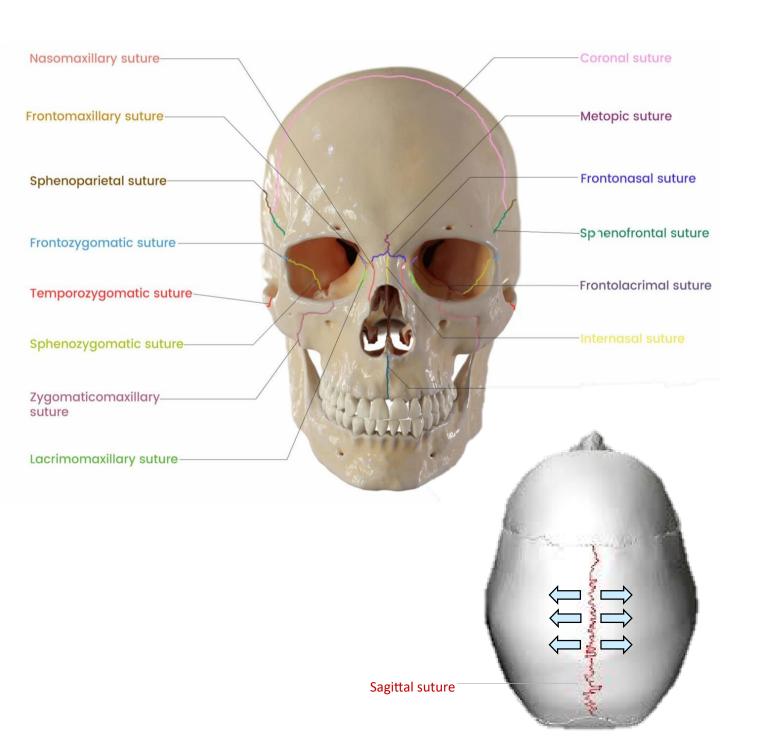


Suture Traction Therapy

- Promotes general symmetry and facial harmony
- Initiates the process of bone realignment
- Used for minor asymmetries or as an addition to the routine for more severe asymmetries
- Techniques can be done unilaterally and organized into a routine for specific type of the asymmetry
- Before STT, ist's necessary to relax the palatine suture
- Position: with elbows on the table, elbows on knees OR while laying down

Suture Traction Therapy Techniques

Place index fingers on each side of the suture. Apply pressure on the bone and pull the fingers to opposite sides to relax the suture.



Intraoral techniques

Purpose

Relaxing palatine suture Paletal expansion Forwards growth Centering the maxilla Improving the symmetry

Position

Laying down
Sitting down with elbows on the table
Sitting down, leaning forward and placing elbows on knees.

Sets and repetitions are highly individualized, but most people can start with 3 sets of 3 repetitions, each repetition includes 10 seconds hold.

Other ratios are possible as well so listen to your body and adjust each technique.

Intraoral relaxation techniques

1. UP AND DOWN

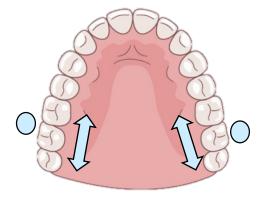
- Anchor down above molars with index fingers and thumbs
- Pull the right side down and gently push the left side up. Switch the sides and pull the right side gently up and the left side down.
- 3 sets of 10 repetitions

2. LEFT AND RIGHT

- Anhcor down above molars with thumbs and index fingers
- Apply forward and backward movement. Goal here is to "swing the maxilla forward-backward
- First apply forward pressure on the left and backward on the right, then do the opposite. Switch between those two states 5 times.
- Don't slide fingers across the gum line, rather apply pressure forward-backward.



Up-down



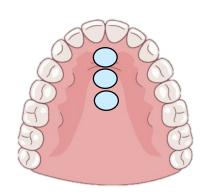
Left-right

Anchor down and first pull forward on one and backward on other side and switch.

Intraoral basic techniques

1. PALATE MASSAGE

- Massaging the palatine suture starting from the middle/ the between the 5th teeth going forward.
- On each point press up and massage in circular motion for 10 seconds, 3 sets.



point

2. LATERAL THUMBPULLING

- Apply upwards pressure on the first palatine point.
- Move thumbs laterally (upwards and lateral pressure).
- Stop before you reach teeth.
- Starting from the front teeth until we reach the point between 4th teeth.
- In cases of severely narrow palate, it can be done until we reach the point between 5th or 6th teeth.
- Thumbs on each side of the palatine suture pull to opposite
- Never apply pressure on the teeth.



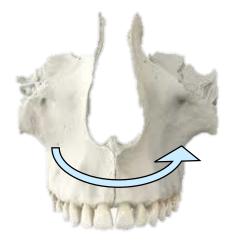
Intraoral centering techniques

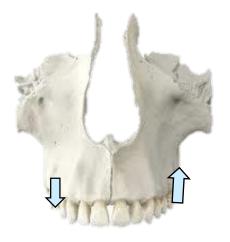
1. Maxilla set back on one side

- grab the maxilla with your tongue and index finger above molars
- Pull the set back side forward and the forward side back
- Use firm but gentle pressure, level 5 at most.

2. Maxilla higher up on one side

- Grab the maxilla with your thumbs and index fingers above molars on both sides
- Pull the side that's placed higher down and pull the lower side up at the same time
- It can be done simultaniously with the technique #1.

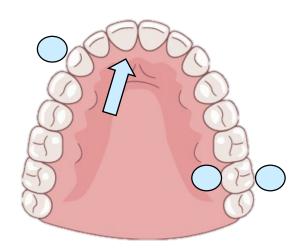




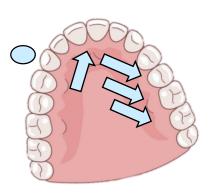
1. 2.

3. Maxilla set back on one side

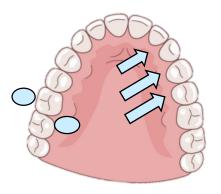
- Grab a maxilla with your index finger and thumb above your canines on the side that's set back
- Achor down the opposite side with your thumb and index finger above molars
- Pull the set back side forward with your thumb (unilateral thumbpulling)



- 4. Maxilla forward and internally rotated on one side, externally rotated and set back on another side
- Grab the set back, internally rotated side of the maxilla above canines and pull that side of the palate forward with the thumb
- At the same time pull the thumb on the opposite side laterally and back



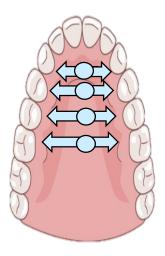
- 5. Maxilla set back and internally rotated on one side, externally rotated and forward on another side
- Grab the maxilla above molars (or canines) on the externally, more forward side of the maxilla
- Pull with the thumb laterally and forward on the narrower, set back side of the maxilla



Intraoral expansion techniques

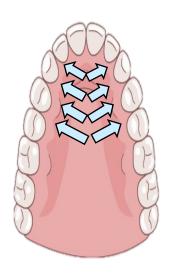
1. Both sides internally rotated

- Apply upwards pressure on the first palatine point with the tips of your thumbs.
- Move thumbs to opposite sides holding that upwards pressure and applying lateral pressure.
- Stop before you reach the teeth and never apply pressure on the teeth.
- Repeat the same until you reach premolars.



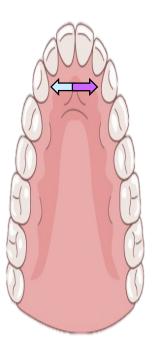
2. Both sides internally rotated & set back (Collapsed or narrow maxilla)

- Apply upwards pressure with the tips of your thumbs on the first palatine point.
- Move thumbs to opposite sides and forward while holding that upwards pressure.
- Hold for 10 seconds, repeat 10 times and move to the next palatine point until you reach premolars.
- 3 sets of 10 reps.



3. Severely narrow maxilla

- Place the tip of the thumb on the first point of the palatine suture
- Apply firm upwards pressure and move thumb laterally to one side applying both lateral and upwards pressure Repeat the same to the other side.
- Repeat 10 times on the first palatine point and move to the next point.
- 3 sets of 10 repetitions. 3x a day.



Forward growth techniques

1. FORWARD THUMBPULLING

• Press on the point between 5th teeth and push forward (10 reps)

- Move on the point between the 4th teeth and push forward (4 reps)
- Repeat 3 times a day, preferably before wearing a mouthguard.





2. MANDIBLE SWING

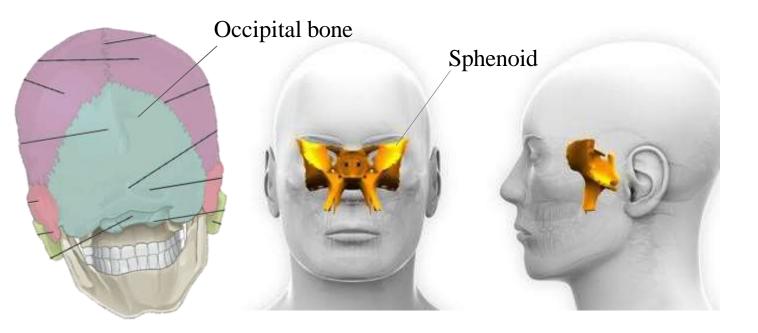
- Place the outer parts of your thumbs under the mandible arches and lay your palms over the sides of your face.
- Slighly open the mouth and gently push the mandible forward.
- Gently swing the mandible back and forth.
- Avoid moving the mandible side to side!

Osteopathic techniques

The **occipital bone** is located at the back of the head, while the **sphenoid bone** sits centrally within the skull, just behind the maxilla.

The **greater wings of the sphenoid** can be palpated through the slight depression at the temples.

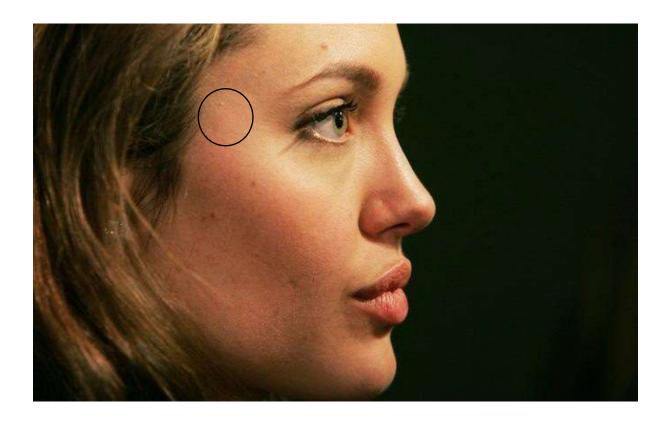
In different cranial strain patterns, the occiput and sphenoid shift in relation to each other. Identifying their relative positioning is essential for selecting the appropriate technique to restore optimal alignment.



Centering sphenoid:

Place fingers on the greater wing of the **sphenoid** (temples) and gently apply a subtle rocking motion both directions.

This will allow for **sphenoid release** and help bring the cranial bones into better alignment, which could help with **maxillary asymmetry**.

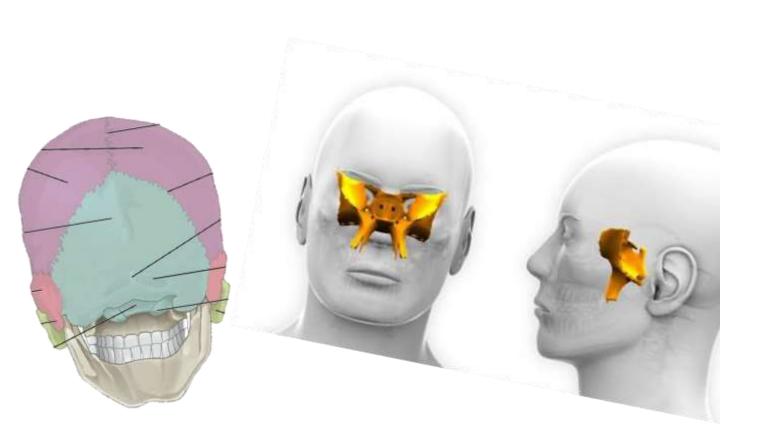


TORSION

Greater wing of the sphenoid is lower on one side but greater wing of the occiput is higher on that side.

The opposite happens on the other side; greater wing of the sphenoid is higher while the greater wing of the occiput is lower.

This can be recognized by higher eye and lower ear on one side and lower eye and higher ear on the other side.



TORSION TECHNIQUE

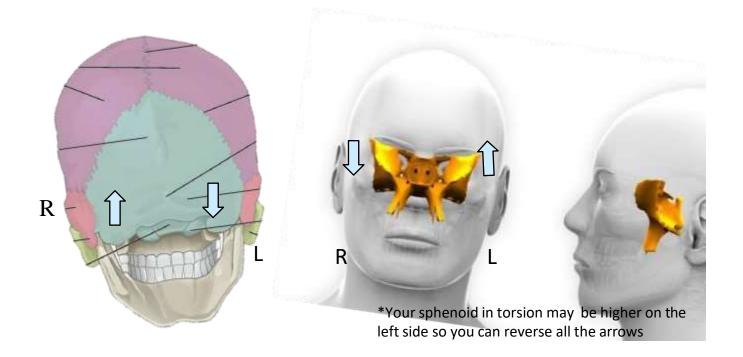
Place index fingers on the sphenoid (temples) and thumbs on the greater wings of the occiput. Push the lower side of the sphenoid up and the higher side of the occiput down, push the higher side of the sphenoid down and the lower side of the occiput up.

Fingers don't move, they stay on sphenoid and occipital bone, but the force direction is different.

This needs to be done gently.

Perform this technique while laying down and hold it for 30 seconds to a minute. Repeat a few times a day.

Don't apply a lot of force, rather do it gently multiple times a day! If you experience pain, stop immediately.



TORSION TECHNIQUE

Place index fingers on the sphenoid and **pull the set back side forward and forward side backward.**

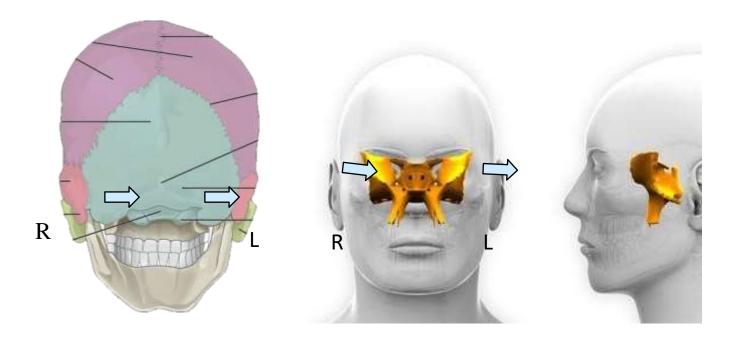
Place thumbs on the occipital bone and do the same movement **pushing the set back side forward and forward side backwards.**

Fingers don't move, they stay at sphenoid and occipital bone, but the force direction is different.

This needs to be done gently and while laying down, your can apply gentle force in those directions and hold it for 30 seconds to a minute.

Repeat a few times a day.

Don't apply a lot of force, rather do it gently multiple times a day! If you experience pain, stop immediately.



SIDE BENDING ROTATION (SBR)

Place index fingers on the greater wings of the occiput and thumbs on the greater wings of sphenoid.

On the side where occiput and sphenoid are closer together pull those fingers apart; sphenoid forward and occiput backwards.

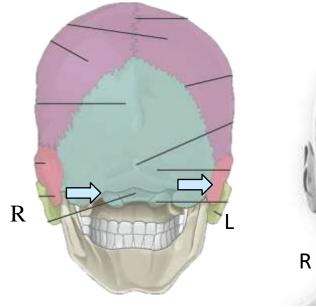
On the side where sphenoid and occiput are further apart, apply pressure like you're trying to bring fingers closer together; sphenoid backward and occiput forward.

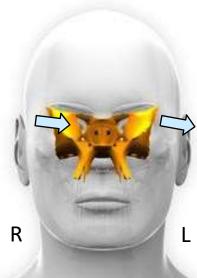
Sphenoid and occiput are closer together on the side where side profile is narrower.

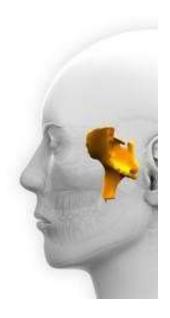
This needs to be done gently and while laying down, your can apply gentle force in those directions and hold it for 30 seconds to a minute.

Repeat a few times a day.

Don't apply a lot of force, rather do it gently multiple times a day! If you experience pain, stop immediately.





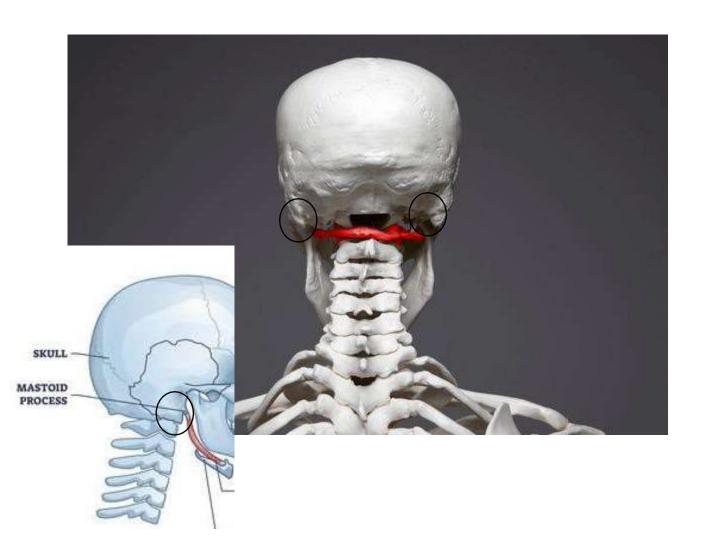


CENTERING ATLAS

This technique is done while laying down on the back. Place thumbs on the mastoid process behind the ears.

Lean your head towards the left side and apply pressure on the mastoid process on that side.

Now lean your head towards the right side and apply pressure on the right mastoid process. Each time keep the pressure for 30 seconds and switch sides. Repeat a couple of times a day.



Reviv

After all of this, you can put in a Reviv One mouth guard. The mouth guard essentially takes care of the soft tissues and teeth component of things, balances the bite, brings the jaws forward and center, expands the palate in 3D, corrects maxillary cants, corrects posture, corrects brain fog and TMJ, as well as a whole host of other things. You might notice that wearing this mouth guard has a lot of therapeutic psychological benefits, such as resurfacing of positive memories from before you had braces, or any traumatic life event that caused you to tense up immensely to the point that your facial structure changed. For women, this typically happens right after birth, hence why their facial structure drastically changes afterwards. Reviv also adds dental height splinting, which is usually uneven in people with torsion, hence causing the maxillary cant. Reviv is the stack of books under a wobbly table.

You can use this link to see what it looks like, but realistically, any mouth guard should work, as long as it looks similar to this. Just make sure it is flat plane, and NOT boil and bite. The actual mouth guard is \$25, and the support package is \$100.

JUST mouth guard:

https://getreviv.com/products/reviv-one-without-support? variant=45729457832177&sca_ref=7996573.04RfhbekemJgWeB0

Skool community, 1-on-1 with Ken, and mouth guard: https://getreviv.com/?sca ref=8368829.JN26uzFhIqS3

You might also notice you are thinking much clearer with wearing the mouth guard regularly overnight and an hour or two a day, and it's most likely a completely different plane of thinking. Something you might have experienced a glimpse of throughout your life, or similar to how you thought about things when you were a kiddo. If your structure is particularly messed up, then you will experience your 5 senses a slight bit more intensely. Almost like taking a low dose of psychedelics. You will see color more saturated, but without hallucinating anything of course. Music will sound good again, regardless of the genre. You might even start listening to music from before you had structural collapse. Food will taste better, you will feel extra details with your finger tips. Life will feel alive again. And it makes sense to feel these effects, as all of our senses are connected to our cranium. So, if the cranium and it's components are twisted, turned, off balance, and compressed, it makes sense that by aligning everything in the correct position, we would gain benefits within our senses, such as vision, hearing, tasting, feeling, etc.

After experiencing what it's like to live in almost complete structural collapse, to going to almost normal person level of structure, I can't tell you how alive I feel. I felt half dead prior to this. I was struggling with all of these health issues for so long, low energy, and I felt that my

cleverness was fading along with my beauty. Some of my health issues I was able to heal naturally with foods and things like that, but I still felt something was wrong with me, ever since I got braces, which was in 2009. I just couldn't quite put my finger on it. So I searched and searched, went through the whole holistic thing and back and just barely got better. Then I started to learn about dental things after I got introduced to the idea of a palate expander. I went to an ortho to see if I could get it, because intuitively I knew something was totally messed up in my mouth. Naively I went, got the xrays and everything done, just so they can tell me I need double jaw surgery and that I was absolutely NOT a good candidate for an expander. I thought to myself "hell to the no" LOL. And that's when this journey began. It's funny, because only recently was I introduced to myobrace. After almost 2 whole years of constant research, I only now found what it is, thanks to Ken, who is the one behind Reviv. He was going through years of also trying to fix himself, and he and I have a similar notion to things. We didn't want to get surgery, we wanted to tinker with ourselves, and throughout this process we figured out a few things. Ken has more than 10 years of experience in this 'game' (as he calls it) and I think he really hit the jackpot with Reviv, because as I was trying it, I realized that this is exactly what's solving most of my issues. Yes, thumbpulling is great, it's essential IMO if you want to speed up results and feel better quicker, and look better also. But the Reviv is almost a completely different level of healing that I've never experienced before. It certainly helps a lot in symmetry and bringing the jaws forward, so in the looks department it's awesome, but the profound healing that I've experienced in wearing this is almost indescribable.

Ken said that headaches are pretty common in the first few weeks of wearing it, as well as some pain in the teeth as they are shifting. As someone who has gone through braces, the tooth pain is not nearly as bad. It's very quite subtle comparatively. The headaches though really do deter a lot of people from wearing it consistently and getting through the first month. I had particularly bad structure compared to the vast majority of people and for me the process was pretty bearable in the beginning. Basically, the worse your structure, the more headaches you will get. But this is a normal part of the process of the skull expanding. Over time the headaches subside, it's just something we have to push through initially, and then we're over the hill on that front.

And you might think I'm absolutely whacko. I like to think I'm just particularly observant of small changes. But I'll leave that up to you to decide. Who knows, maybe I am crazy:] or maybe this is the key to unlocking something science won't touch for another 50-100 years.

Stretching the body. You will notice that with wearing Reviv, you will naturally want to stretch your body more often. This is a great sign! As there is a connection between symmetry of the face and flexibility of the body. The most flexible people on the planet are all very symmetrical. Ken talks about this in this article, that I find particularly interesting:

https://reviv.substack.com/p/the-jaw-body-connection?utm_campaign=post&utm_medium=web

I came across his substack after I was searching up why the Mew's had an incident where one child got seizures from their Biobloc appliance. I kept reading and reading, and I realized that he is actually the 2nd person in the US along with a guy who's relatively famous in the looksmaxxing community known as 'Plato' to try the Starecta appliance. I kept reading his substack and I just absolutely fell in love with it.

Ken along with Marcello, who was also a really knowledgeable guy especially in the field of dentistry, have the idea that the skull inflates like a balloon, and as we age, get braces, grind our teeth down, or flatten the curve of spee artificially, the balloon starts to deflate. So if you look at your face, there will be areas of your face that are 'deflated' in a sense, if you have torsion, and that is primarily going to be only one side of the face. The idea is basically that adding dental height, and raising the curve of spee, you can achieve a perfectly symmetrical face and body (with a lot of stretching in this process) that looks like any runway model such as Kate Moss or Shalom Harlow, with inflating the skull like a balloon. We all have this genetically coded into us, but through various factors such as birth, trauma, braces, age, etc. the structure begins to collapse. The question becomes that if humans are able to counteract this biological law, that our teeth grinding down is really the root cause of death and illness, then what's to stop us all from living past 100 or even 150 years old?

Of course, in practice we will see how it plays out. I am generally a very skeptical person, hence why I don't normally trust anything that doctors or orthodontists do. I also acknowledge that a lot of these ideas seem a little far out there. But back in the day, Copernicus also had pretty 'out there' ideas and they turned out to be pretty true. So hopefully, this is one of those things. In terms of applying it to my life and my structure, I do feel exactly what Ken talks about in regards to the Reviv appliance(s) and he really is onto something. Theories like 'are there aliens in the universe' are difficult to prove in practice, but this is something quite easily proven by just wearing the appliance and recording the changes your body is going through.

To aid the relaxation and stretching process, you can use a magnesium lotion.. And preferably you would find a magnesium lotion that doesn't absolutely obliterate your skin. I'm currently in the process of formulating one at the moment that is safe to use on skin and that is potent but doesn't burn. If the case study on the cream turns out to be a success, it will be on my website available for purchase.

You can start with thumbpulling ie, rotating the maxilla back to center, expanding the palate in 3D, and asymmetrical zygo pulling on the smaller side of the cheekbone. Then lastly, clean your teeth (hopefully, with Dr. Ellie's Protocol, which I HIGHLY recommend checking out), clean

your mouth guard, put it in and go to bed. If you're under 25, you can do each exercise about 3-5 minutes per day, and if you're over 25, I would shoot for about 5+ minutes per day, per exercise.												
Why Cranial Strains are NOT 100% Reliable												

In this section, we are going to explain why cranial strains are not a 100% reliable and good method to determine asymmetries. Do they work sometimes? Yes. Do they work ALL the time? Nope. Is it extremely confusing for most people? Yes.

Initially, when we started talking about cranial strains, we thought it was a great scientific method to explain asymmetry patterns. As we have started doing consultations, we realized through looking at over 1000+ people's pictures and structures, that cranial strains are not all cut and dry. The reason for this, is that many people have overlapping strains, there are multiple ways a head can tilt, jaws can reposition, and muscles can compensate, ESPECIALLY, when you throw in something like braces or retainers. What we saw, is that most of the time, people with braces exhibit an initial cranial strain that perhaps they were born with, and then as they get braces or retainers, the orthodontist moves teeth in an occlusion that's not straight with the jaws. Their method of determining where 'straight' is, is completely arbitrary, and has no reference to the jaws or the head or neck. To add in curve of spee into the mix, a lot of the times they also flatten the curve of spee unevenly, basically contracting the jaws in the back unevenly. This greatly reduces stability in the body, and over time this contributes to total biomechanical collapse.

A better way, in our opinion, to determine asymmetry at home, is through stacking the cranium. This levels the eyes, the lower jaw, and with twisting and turning the head while turning and twisting the lower jaw around to find new positions, you can achieve some pretty good symmetry. The REASON the asymmetry is happening, as in the root cause, is this curve of spee issue, and the jaws contracting unevenly in the back retromolar area. The head tilt, twist, and therefore later muscle compensations, are the direct result of that curve of spee flattening, or flattening unevenly.

You know when you take a selfie, or look in the mirror, you see yourself as more symmetrical than if someone else takes a photo of you? Try and turn and twist your head in that position, and then move the lower jaw around to find perfect symmetry, which likely already exists within your face. Now you'll see how this works. It is not that your bones or face developed wrong, it is that the body outside of it is twisting and compensating, so that the skull basically doesn't just crush the spinal cord and kill you. This is why stretching the jaws, supporting the cranium with a splint or mouth guard, expanding the mouth, and habitual stretching, are all very very important to restore nature's intended beauty within yourself.

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Here are some techniques:

Head tilting:

Tilting the head to make the eyes level. Ie: if one eye is higher, tilt the head in the direction of that eye, so that it is no longer higher up on the face.

Head twisting:

If one side of your face looks fuller and more forward, simply rotate your head so that that side of the face is more set back.

Jaw positioning:

After this, you want to position your jaw in a way that lines up with the new cranial position, so you can achieve symmetry.

- 1) Lateral shifting
- 2) Forward Twisting

Lateral shifting refers to just moving your jaw side to side. Play around with this and see which one yields a more balanced face

Forward twisting. This one is a little bit more complicated, as it has a lateral and forward component to the puzzle. So first shift laterally to see which way the jaw needs to swing to achieve more symmetry, THEN attempt to move one side more forward, so that the chin is also symmetrical in this case.

More than likely, a lot of jaw asymmetries can also simply be solved with a simple head twist and tilt.

Now after you have achieved symmetry, the hard part is retraining the muscles and visual field to fit this position. This has to include body work such as neck traction, stretching tighter neck muscles, gaining mobility, stretching the whole body and basically manually unwinding it.

For example, a lot of people with lateral strain, will also have one side of the body be more forward than the other. They might also have a more compressed diaphragm, or rounded shoulders, hiked hip, etc on that side of the body, where the face is more forward/fuller as well.

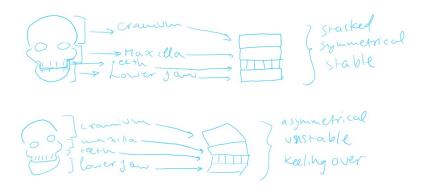
Stretching all of the body's muscles that yield in asymmetry of the body, also have an effect on the face as well, while working with the face has an effect on the body as well. I personally think this primarily has to be because of visual cues about spacial awareness relating back to body cues in relation to tightness. So for example, if your eyes are used to having to look left a lot, eventually your body follows. Ie: people who play tennis and only play forehand.

The opposite is true as well, if your body has tightness in it, causing you to turn left, then the visual field will follow, and think of left, as the new straight.

So, while it takes a bit of time to untrain this, it is possible. We unfortunately, don't have a guide for it, but you can think of it like how stacking the cranium would have a ripple effect on your

body through walking, running, thinking, etc. as you are more and more able to move around in this new head position. If your head is cocked to the left, you shouldn't just sit and train your muscles to have it cocked to the right, as there's not really a good way to know when things will be perfectly center. It's important to stack the cranium as often as possible and try and move around in that new cranial position, so that the visual field can adjust, and the body can remodel.

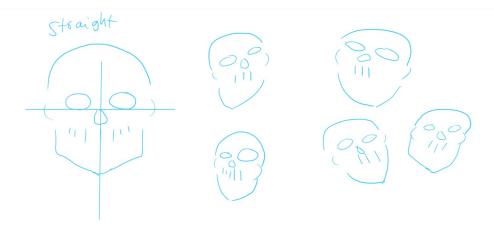
Skull Mechanics



Just purely from a physics standpoint, which structure is going to withstand wind, earthquakes, time and gravity? Probably the one that's meticulously stacked. This is the same with craniums. And the soft tissue plays a huge role in this process. Usually, the 'worse' side has more muscle compensations to keep the structure upright. Now, imagine what this can do in terms of muscle compensation for your entire body? Possibly which organs become more compressed than others?

It's kind of like a wobbly table, with one leg being shorter than the rest. The table leg in this scenario is our teeth! So you can stack books under the table, to make it even, stand strong, and not be wobbly anymore. In our case, we can use a flat bite splint, or a silicone mouth guard to balance the skull. Be careful with bite splints though, as they don't always automatically center the skull if they are indexed, as in they have teeth marks. You have to make sure it's a FLAT bite splint. Or even more convenient is a flat plane mouth guard like Reviv or Myobrace.

Just imagine how many different directions the head and jaw can tilt and twist:



The foramen magnum, is the little hole in the underside of your skull that connects to the cervical spine. That's also where your brain stem is roughly:] So you can imagine how function can impede by compressing that area. This is why you experience positive neurological effects after raising curve of spee and balancing your cranium correctly on your cervical spine. To do this, you can put your hands underneath your skull in the occiput area, and play around with twisting and tilting your head back and forth, left and right, so that you can get an equal amount of 'skull' in each of your hands. Then at the same time feel your lower jaw with your thumbs and try and balance that together with your cranium.

This is a good exercise to see where your neck is tight, the mobility if your jaw, and how it wants to balance due to muscle tension.



This may or may not teach you something about your body, but hopefully it gets you a good idea of how the lower jaw balances the skull. Now imagine if the curve of spee, ie the ligaments that hinge open the jaw, is artificially flattened and contracted. Those ligaments connect all throughout the face and when contracted or displaced, it can affect your whole face and function.

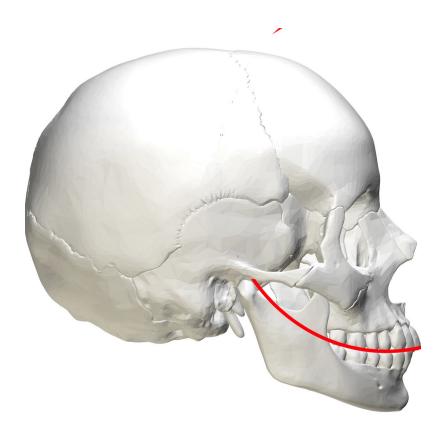
Place your 4 fingers under the occiput area of the skull, then your thumb under your jaw. Lift it up gently and try and balance your head and jaw in a way where equal weight is applied to both

hands. You can take a video of yourself doing this to help too. Then, try and center your jaw and head according to cranium stacking, and see how much weight each of your hands bear now. I'd be curious to hear how this works out for you and what you feel.

Curve of Spee

Curve of spee is arguably one of the most important pieces to this puzzle so far, and I thank Ken Leaver and Marcello for introducing this idea. I heard about it from Ken Leaver, and it changed my ENTIRE world. I was set on cranial strains up until learning this piece of information and how CRUCIAL it is to fixing your biomechanics.

Curve of spee is the line you draw on your side profile, tracing your occlusion up to the ear.



This is a natural curvature found in humans, and it is imperative in balancing the skull on the cervical spine. This is why a lot of people after braces, get a hunchback, bad posture, forward head posture, or scoliosis after braces, or in old age. Some people are born with it too, which likely has something to do with the birthing process or being compressed asymmetrically in a compensated mother within the womb. These postural issues can be traced back to the flattening of this curve of spee, and you have to remember, we technically have 2 curves of spee.

If one side of the curve of spee is flatter than the other, this equals scoliosis. If they're both equally flat, you get forward head posture and kyphosis. To raise the curve of spee back to it's natural balanced inclination, you have to do a couple of things:

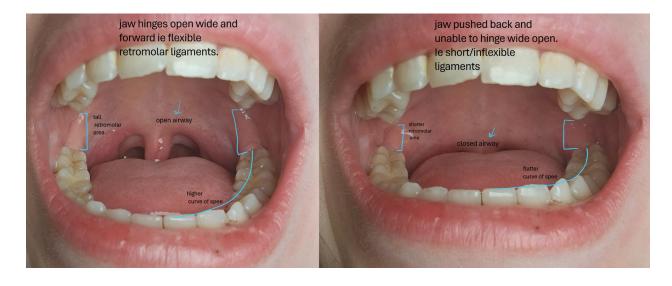
- 1) Stretch your entire body like it's nobody's business. EVERY square inch must be FULLY mobile and flexible
- 2) Keep the curve of spee high at night via a flat plane mouth guard. At night is when this curve closes back up again.
- 3) Retromolar area stretches are a bonus, but they speed up the process in our opinion.
- 4) Neck traction and stretching the neck so that the skull isn't pulled down or forwards.

The retromolar area (the area retro to the molars, where your jaw hinges open behind the molars) houses a lot of ligaments that connect the maxilla, mandible and sphenoid together, amongst other bones. So if this area is artificially contracted and stuck in a closed and flat position, it

essentially zip ties the mouth shut from the back, and causes all sorts of balance, symmetry, biomechanical and psychological issues. Imagine putting a muzzle on a dog basically. What tends to happen when a dogs mouth is physically held shut? Well, they tend to not bark. Humans however, would be too smart to just willy nilly go get our mouth zip tied shut, so they had to do it from the back of the mouth. This is why people lose their voice, or get muffled voices after braces, and why they gain their voice back after they open that area back up again. Singers know this, that if you habitually keep your mouth shut while singing, nothing really comes out, vs, when you hang your jaw open to sing, all of a sudden you get a large projection of sound. Now imagine that with braces, the back of the mouth is artificially compressed and pulled down. Not great for our physiology, to say the least.

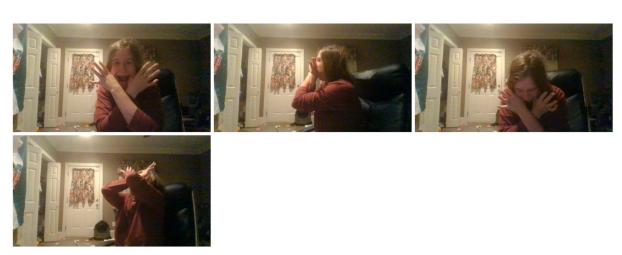
It's the difference between talking with your mouth closed, and talking with your mouth open. This is not to say that orthodontists, or even the people developing their curriculum in the first place, know this. What i've realized based on looking into orthodontic curricula, as well as speaking to multiple orthodontists, reading studies by orthodontists and maxillofacial surgeons, is that they, literally, have NO IDEA what they are talking about. The only 'dentist' I would actually trust would be the TMJ dentist Dr. Brendan Stack, who unfortunately has passed away. He realized that with this curve of spee being flat, that it causes a whole host of neurological issues, and by creating flat splints for his patients, he was able to reverse Parkinson's disease, Tourette's syndrome, and even got a girl out of a wheelchair. This man was extremely kind, sweet and genuinely wanted to help people. You can just tell by the way he interacts with his patients, and of course, his work. However, I believe I read somewhere that his family unfortunately did not treat him so kindly. So hopefully we can remember his name and wish him the best in the afterlife, because I really genuinely think more people need to know more about his work and his contributions to humanity are HUGE.

To visually drive this point home, here is a mouth.



Imagine the retromolar area being really tight, vs very flexible. Well, those mechanics, whether your jaw opens wide or doesn't, is a huge piece of the puzzle to widening, lengthening, and basically expanding the entire skull. There are a multitude of ligaments back there in that retromolar area, that connect your facial bones together. So, if they are tight, like a hamstring would be, it impedes function of the mouth, and aesthetics.

So how do you stretch it out? Well, there's 2 ways, and I recommend you do both. One way is to reach back there in the area highlighted as the retromolar area in the above picture, and stretch it up, down, and sideways, while opening your jaw. You can use gravity to your advantage and use the weight of your skull to add extra stretch, if you prefer. Here's how I look doing it:



Obviously, one of the more flattering photos of myself. :]

I do these stretches whenever I need a boost in mental clarity, or when I feel like my posture is slouching. It's relatively easy to do in public too, if you don't do both hands at the same time, and if you have long hair, that's a nice little curtain for it too. It basically acts the same way as the mouth guard, by manually raising the Curve of Spee.

The second option to stretching this area, and it's a bit more passive, is wearing a flat plane mouth guard at night, to keep that stretch open. You can also wear it a few hours during the day, or do these stretches for a total of 15-20 minutes per day, either way is fine.







Now imagine all the different types of ligaments connected throughout the skull and how any tightness of these ligaments can lead to asymmetry, how it would impede function of the skull, balance, etc.

The sphenomandibular ligament is a ligament that connects the sphenoid bone to the mandible (lower jaw). It is located in the region of the temporomandibular joint (TMJ), which involves several other ligaments. Here is a list of ligaments that are nearby or associated with the sphenomandibular ligament:

- 1. Temporomandibular Ligament (Lateral Ligament)
 - This ligament is one of the main stabilizers of the TMJ, running from the zygomatic arch of the temporal bone to the mandibular neck. It helps prevent posterior displacement of the mandible.

2. Stylomandibular Ligament

 This ligament runs from the styloid process of the temporal bone to the angle of the mandible. It helps limit excessive movement of the mandible and provides support to the TMJ.

3. Temporalis Muscle Tendon

• While not a ligament, the tendon of the temporalis muscle, located near the sphenomandibular ligament, can be considered a functional contributor to the

area, as it helps with jaw movement.

- 4. Sphenopalatine Ligament (indirectly near the area)
 - This ligament connects the sphenoid bone to the palatine bone, located somewhat near the sphenomandibular ligament, though not directly related to the TMJ.

This is why cranial balancing is important and stretching out the ligaments in the retromolar area, as these are all connected in holding up jaw position and head position. These ligaments are the key to stretching out the skull and decompressing it from tension, and sort of 'uncrumpling' it.

Stretching

In order to relieve muscle tension it's necessary to stretch out facial muscles multiple times a day.

1. PUFFERFISH STRETCH

Fill your mouth with as much air as possible.

Direct the air under your cheeks, upper and lower lip and feel the muscles stretch.

Keep for a couple of minutes and repeat a few times a day.

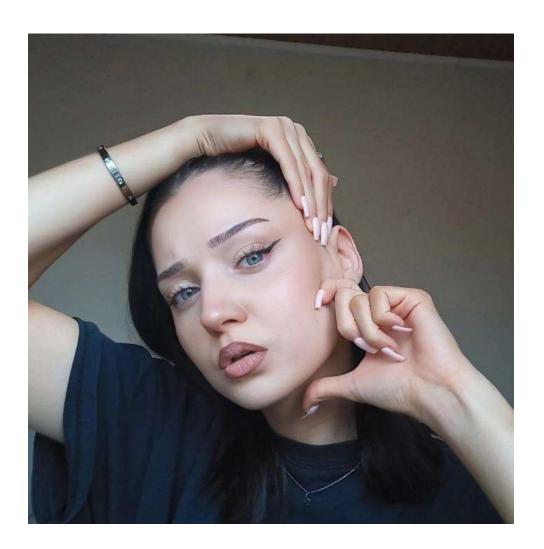


Jaw relaxation

2. CHEWING MUSCLES outside

Open your mouth a little bit and massage your chewing muscles from top to bottom Make sure the pressure is firm and deep, but do not hurt yourself

Do the massage for 1 minute on each side.



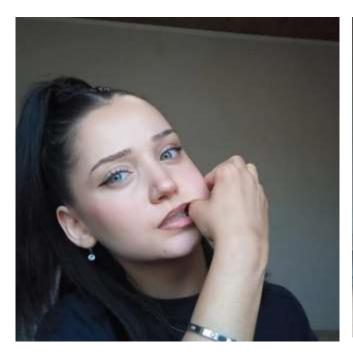
3. CHEWING MUSCLES inside

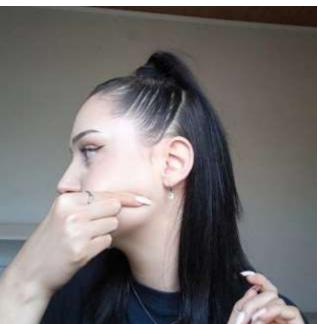
Place the thumb inside of your mouth and the index finger on the outside of your cheek

Press your teeth together in order to contract the chewing muscle so you can relocate your fingers if needed

Open your mouth to relax the muscles again

Deep massage the muscle for 1 minute on each side.

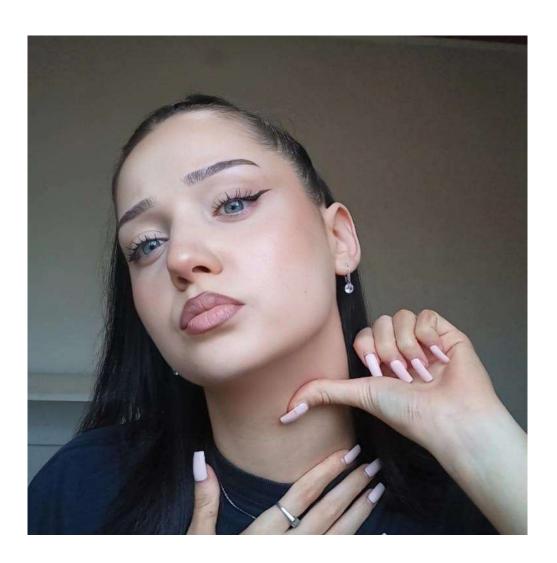




4. NECK

Put some oil or cream on your neck so it is easier to deep massage it Massage the neck from both directions (up and down) with your thumb

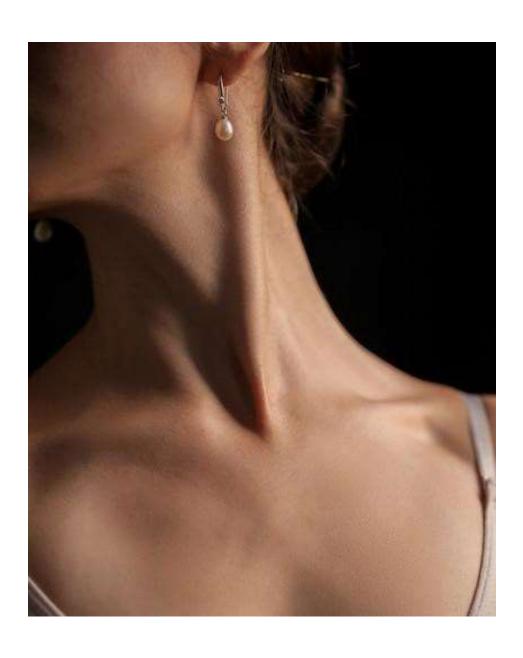
You can adjust this massage to your preferances, BUT make sure to relax the neck muscles daily.



5. STERNOCLEIDOMASTOID MASSAGE

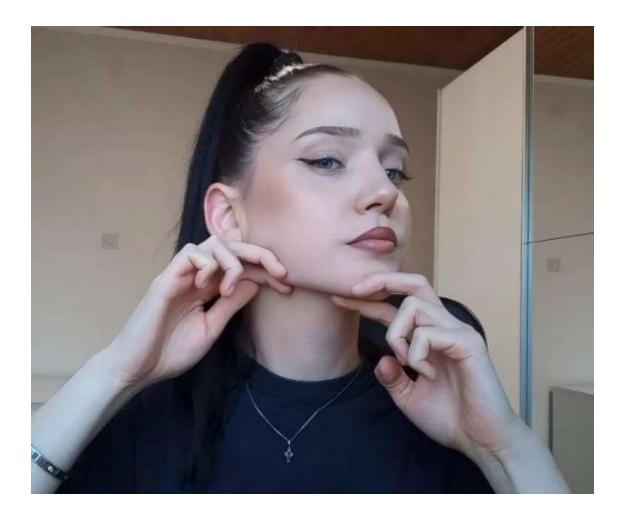
Turn your head to your side to find the muscle Grab it and deep massage it

Slightly lean your head to the opposite side to deep massage it Repeat on the other side.



6. JAWLINE STRETCH

Place both sides of your jawline between the index and middle fingers Slide them to the opposite sides.

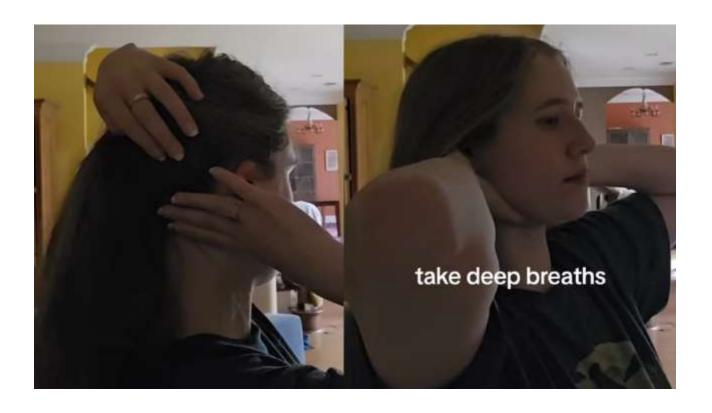


7. NECK TRACTION

Straighten your neck and place your fingers on the back of your head, thumbs under the mandible.

Apply upwards pressure and hold for 30 seconds to a minute

Repeat a couple of times a day..





8. RETROMOLAR STRETCH

Place your thumb inside your mouth, resting on the gum behind the last molar. Press gently but firmly on the retromolar pad, feeling for tender spots.

Move your thumb in small circular motions for 30 seconds to 1 minute. Pull slightly outward to stretch the tissues if they feel tight.

