From Torsten Liem, D.O., Osteopath G.Os.C (GB)
The dissection sequences are from Dr. med. Louis-Philippe Dombard (Brussels)

Osteopathy, developed at the end of the last century by A.T. Still, with its claim to being a holistically oriented healing system, is classified by the use of hands to heal diseases.
The principles of osteopathy are based on the unity of the organism, its self-regulatory and healing forces, the reciprocal influence of the body structure, or tissue, and their function, or physiology, the importance of circulation, as well as putting these insights into practice.
The concept of craniosacral osteopathy was developed at the beginning of the 1930s by William Garner Sutherland. It consists of the application of osteopathic principles on the skull. In addition to the heart rate and the respiratory rhythm, craniosacral osteopathy integrates another rhythmic phenomenon with homeostatic effects called the Primary Respiratory Mechanism. It also refined the skills to release tight body structures with very fine impulses.

(The subdivision of osteopathy into different parts is only for didactic reasons and is arbitrary. For example one can separate the parietal or musculo-skeletal, the visceral, cranio-sacral, veno-lymphatic, fascial, neurovegative, endocrine, energetic, pediatric osteopathy, etc.)

Osteopathy does not primarily deal with special techniques. That is why the founder, A.T. Still, has rarely described any techniques in his various publications. Each osteopath will have the capability of developing his own techniques in his practice, which adapt to the individual needs of the patient.

Osteopathy is a specific view point, which enables certain therapeutic procedures to release restricted motion, to enable unrestricted circulation, nerve and energy supply and to release resources which allow healing in the best possible way. The art of practicing Osteopathy, which means the consciously done palpation, is based on a philosophic and scientific foundation.

Through palpatory perception of normality or of homeostatic forces, the osteopath tries to get close to the wholeness of the patient. The first and most important foundation for the osteopath is the sensory experience of normality, meaning the health in the tissue. That is not a mechanical or technocratical palpation, but a deep, subjective experience, which, according to Sutherland can be experienced most clearly in a state of stillness.

I especially want to recommend the following publications:
Contributions of Thought by W.G.Sutherland, die first edition of Osteopathy in the Cranial Field by H.I.Magoun, aswell as the books by Rollin Becker.

2. The following part shows the bones of the skull and important anatomical structures.

2.a)
Ossification
- Occipital bone:

Lower part of the occipital bone including the supra-occiput develops from cartilaginous tissue.
The inter-parietal occiput develops from membranous tissue.

- Sphenoid bone:

The body, the lesser wings and the lower part of the greater wings develop from cartilage:
Both pterygoid processes and the upper part of the greater wings develop from membranous tissue.

- The ethmoid bone and the vomer develop from cartilage.

- Temporal bone:

The petrous portion develops from cartilage
The squamous portion and the tympanic portion develop from membrane
The petrous portion is the part of the skull which ossifies first. In the 22nd foetal week the ossification of the auditory system is already completed. At birth the squamous portion and the tympanic portion are already partly connected, forming the tympano-squamous fissure, which can be a possible location for intraosseous dysfunctions.
The squamous portion, the petrous portion and the styloid process melt together during the first year.
The mastoid process doesn't develop until after the second year and can not be palpated on a newborn.

- The frontal bone develops from membranous tissue. Only the nasal spine develops from cartilaginous tissue.

In 85 to 90% of the cases, the metopic suture ossifies by the 7th year.

- The parietal bone ossifies from membrane. There is one ossification centre located in each parietal eminence.

- The maxilla and pre-maxilla are formed from membrane between the 7th and 8th foetal week.

- The other bones also develop from membranous tissue. (no picture)

3. Points of Orientation on the skull:

Gnathion is a median point on the tip of the chin of the lower jaw
Nasion is a median point on the fronto-nasal suture
Glabella is a flat field between the eyebrows, on the lower part of the metopic suture
Ophryon is located over Glabella
Pterion is the joining point of the frontal bone, the sphenoid bone, the temporal bone and the parietal bone
Asterion is the joining point of the occipital bone, the parietal bone and the temporal bone
Bregma is the meeting point of the sagital suture and the coronal suture
Lambda is the meeting point of the sagital suture and the lambdoid suture
Inion is at the external occipital protuberance and is a more or less obvious bulge at the back of the skull
Opisthion is a median point at the posterior rim of the foramen magnum
Basion is a median point at the anterior rim of the foramen magnum

4.

4.1.1 and 4.1.2 The structure of a suture will be discussed and different kinds of sutures will be demonstrated.
4.2. The sutures of the skull will be portrayed in an overview
4.3. In the following, the overlapping of the sutures is shown. Knowledge of these biomechanic relationships is important for the release of sutural restrictions

- At the **coronal suture**, the frontal bone overlaps the parietal bone in the medial part,
- while the parietal bone overlaps the frontal bone in the lateral part
- At the **spheno-frontal** suture the greater wings of the sphenoid overlap the frontal bone
- At the **spheno-squamous** suture the temporal bone overlaps the greater wing of the sphenoid in its portrayed vertical part. One can not see how the greater wing of the sphenoid covers the temporal bone in its horizontal part.

The changing point of the overlapping is called spheno-squamous pivot point.

- At the **spheno-parietal** suture the parietal bone is covered by the sphenoid bone
- At the **parieto-squamous suture** the temporal bone generally covers the parietal bone. In the anterior part it is possible, that the borders switch and that the parietal bone overlaps the temporal bone
- At the **parieto-mastoid suture** the temporal bone covers the parietal bone. It is also possible, that the parietal bone is bevelled medially at the anterior end and therefore overlaps the temporal bone.
- At the **lambdoid suture** the occipital bone overlaps the medial part of the parietal bone;
- while the parietal bone overlaps the occipital bone in the lateral part.
- At the **occipito-mastoid suture** the temporal bone overlaps the occipital bone in the cranial part
- In the caudad portion the occipital bone overlaps the temporal bone.
  This however does not occur regularly
  The change of the overlapping is called condylo-squamo-mastoid pivot point.
- At the **temporo-zygomatic suture** the temporal bone is usually overlapped by the zygomatic bone.
- At **Pterion** the sutures overlap. At the bottom is the frontal bone, followed by the parietal bone and the sphenoid bone. At the surface is the temporal bone. To help you remember you can use the alphabetical order of the participating bones: F,P,S,T. Pterion is a relatively fixated zone
- At **Asterion** the occipital bone is at the bottom, followed by the parietal bone and the temporal bone is on top. In contrast to Pterion, Asterion is a relatively mobile zone.

5. Palpation of the sutures: Do not use your fingertips for palpation, but the front part of the finger that is placed on the tissue, giving you a greater area of perception. The sutures can be perceived as a fine furrow (groove), or sometimes (less often) as a protrusion. Some sutures are covered by soft tissue and can therefore hardly be felt.

- **coronal suture:** Palpate with both fingers from the forehead posterior until you perceive a fine furrow (groove, channel) or less often a protrusion. You follow this from medial to lateral until about 2 finger's width posterior of the lateral edge of the eye.
- In the middle of the coronal suture is a little indentation, **Bregma**.
  Bregma is about the same distance from the hairline as the hairline is from the eyebrow.
- From Bregma you palpate posteriorly along the sagittal suture.
- At the end of the sagittal suture you palpate an indentation at the back of the skull: **Lamda**.

- About to finger's width posterior to Bregma, on the sagittal suture lies **vertex**, the highest point of the skull.
- Now palpate **Asterion**, the joining point of the occipital bone, the parietal bone and the temporal bone, which is located about 2 finger's width behind and 1 to 2 finger's width above the ear's hole (concha). Asterion is a fairly mobile zone, compared to Pterion.
- The connecting line between Asterion and Lambda is the **lamdoid suture**
- Palpate the **occipito-mastoid suture** caudally from Asterion along the posterior ridge of the mastoid portion.
- From Asterion anterior along the upper ridge of the mastoid portion you palpate the **parieto-mastoid suture**
- The 1cm² large area about 2 finger's width posterior of the fronto-zygomatic suture is called **Pterion.** Here the frontal bone, the parietal bone, the sphenoid bone and the temporal bone join together.
- Anterior to the parieto-mastoid suture the **parieto-squamous suture** runs in a half circular shape about 2 to 3 finger's width above the ear's hole to Pterion. This one is covered by the strong temporalis muscle and is therefore hard to feel.
- Now palpate the **fronto-zygomatic suture** at the lateral edge of the eye.
- The **spheno-frontal suture** is located in a line running from the fronto-zygomatic suture about a thumb's width posterior and minimally cranial. This suture is hardly palpable.
- The spheno-frontal suture goes on into the **spheno-parietal suture**. A small area at the anterior lower angle of the parietal bone. This suture is also hardly palpable due to the temporalis muscle.
- The **spheno-squamous suture** is located approximately on the connecting line between the temporo-zygomatic suture and Pterion. It is 2 finger's width posterior to the lateral edge of the eye. It is hardly palpable because of the temporalis muscle.
- Palpate the **temporo-mandibular joint** directly anterior to the tragus of the ear (no film).
- The **temporo-zygomatic suture,** a small furrow, is palpable about 3 finger's width from the tragus at the temporo-zygomatic arch.
- Place 2 fingers below the fronto-zygomatic suture along the orbit. From there the **zygomatico-maxillary suture** runs laterally and caudally
- At the nasal portion of the frontal bone one can palpate the **fronto-nasal suture.**
- Following that is the **fronto-maxillary suture.**
- In the median line (midline) the **inter-nasal suture** is palpable
- Between the nasal bone and the maxilla runs the **naso-maxillary suture**
- Between the maxilla and the lacrimal bone runs the **lacrimo-maxillary suture**
- Between the two maxillae you can palpate the **inter-maxillary suture.**
- In 10 to 15% of the adults, the **metopic suture** can be palpated on the midline at the lower part of the squama of the frontal bone.
- The **transverse palatine suture** runs between the maxilla and the palate bone.
- Palpate the **median palatine suture** between the two maxillae in the median line from anterior to posterior.
- Posterior to the transverse palatine suture the **median palatine suture** lies between the two palate bones.

7.

7.1.1.1 Here you see the formation of the meninges: the dura mater on the outside, the arachnoid in the middle and the pia mater on the inside. The outer meninx, the dura mater, consists of compact, uneven and very tough connective tissue with many collagenic (fibrous) fibers. There are several places in the skull where the meningeal dura folds inward, so that cavities are formed for the venous vessels, as for example in this case the superior sagittal sinus. Dura duplications, that are as thick as a fingernail, are formed: The falx cerebri, the falx cerebelli and the tentorium cerebelli.

7.1.1.2 The falx cerebri divides the two hemispheres from each other. The tentorium cerebelli devides the cerebellum from the cerebrum and extends like a tent over the cerebellum. The falx cerebelli divides the two halves of the cerebellum.

7.1.2 The structure of the fibre forms through the forces that have an influence on the dura.

7.1.4
Anterior inferior the falx cerebri is attached to the ethmoid bone's Crista galli.
The falx cerebri attaches to the frontal bone at the frontal crest and at the sulcus of the superior longitudinal sinus.
On the parietal bone its attachments are on both sides at the sulcus of the superior longitudinal sinus.
At the occipital bone it attaches at the sulcus of the superior longitudinal sinus and at the internal occipital protuberance.

The tentorium cerebelli attaches at the internal occipital protuberance and at the sulcus of the lateral sinus of the occipital bone.
It runs laterally along the little parieto-mastoid suture and attaches there with its upper layer, at the lower posterior angle of the parietal bone, while its lower attachment is located at the mastoid portion of the temporal bone. Dysfunctions can easily occur at this place.
Further along, the tentorium is attached at the margo superior of the petrous portion of the temporal bone.
In the front, the lateral parts of the tentorium are attached at the two posterior clinoid processes of the body of the sphenoid. The internal edges (rims, boarders) of the tentorium continue anterior, cross the anterior lower layers of the tentorium and are attached at the anterior clinoid processes of the lesser wings. The trochlearis nerve lies at the point where the internal part of the tentorium crosses the external part. It can be disturbed through abnormal tensions or ossifications of the dural attachments.

The falx cerebelli attaches to the bottom side of the tentorium and runs along the occipital crest from the internal occipital protuberance to the foramen magnum. There it participates in the formation of a strong fiber ring surrounding the foramen magnum and then continues down into the spinal cord as the spinal dura mater.

All dura duplications meet in the sinus rectus (straight sinus), the so called Sutherland fulcrum.

7.1.5. In the following the innervation of the cranial dura mater is portrayed.
The anterior cranial fossa is innervated by the ophtalmic nerve and the maxillary nerve.
The middle cranial fossa is innervated by the maxillary nerve and the mandibularis nerve.
The posterior cranial fossa is innervated by the glossopharyngeal nerve, the vagus and the first to the third cervical nerves.
The falx cerebri and the tentorium cerebelli are innervated by the ophtalmic nerve.

7.1.6
Pain from the anterior cranial fossa radiates to the eye and to the retro-orbital region.
Pain from the middle cranial fossa is referred to the face, the vertex, and to the retro-orbital region.
From the posterior cranial fossa the pain goes to the retro-auricular region, the back of the head and the neck.
From the falx cerebri pain radiates into the eye.
From the tentorium cerebelli there is pain radiation into the eye, the front of the head and into the retro-auricular region.

7.2

To show their functional unity, Sutherland referred to these dural membranes as a "reciprocal tension membrane system". According to Delaire the horizontal system gives tension to the cranial base and the vertical system gives tension to the vault.
This membrane connects the cranial bones with each other, with the purpose of regulating and limiting the movement of the bones. Each traction on one side of the reciprocally moving membrane changes the whole unity and leads to a new balance.

Sutherland Fulcrum:
In order to guarantee the balance of the mebranous tension the membranes have to operate from a relaxed point – the Sutherland fulcrum- a ficticious point along the straight sinus. This suspended floating relaxed point can move automatically and makes it possible for the cranial bones to move in an even, physiological way. The whole intra-cranial and intra-spinal dural tension membrane moves and organizes around this point. It is an automatic shifting suspended fulcrum.

Especially during birth and in early childhood these intracranial membranes are the main element guaranteeing the integrity and unity of the skull, the cartilaginous and membranous precursors of the skull bones, and protect the brain.

7.3
The dura mater is tightly attached at the level of the foramen magnum, the first to third cervical vertebra, the second sacral segment and the coccyx.

Between that the dura is not so tightly attached and relatively mobile.
Movement of the skull and the sacrum can be transferred to the spinal dura mater. Even movement from beyond the cranio-sacral system, for example a tension at the sciatic nerve, may be affecting the dura.

8.1
The development and the point of origin of the so called cranio-sacral rhythm are just as disputed as their distribution throughout the body and their clinical relevance. A lot is possible, little is proven.

This leads to a wide range of speculations and also gives room for extremely speculative teachings of cranial healing. Methodologically adequate studies about the clinical efficiency of osteopathic treatment in the cranial field are urgently necessary.
You can find descriptions of currently existing possible explanations and clinical studies in the 3rd edition of Torsten Liem's "Kraniosakrale Osteopathie"

8.2
A multitude of measurement results about rhythms at the head exist. These are based on the results of variable methods of measurement, and on reports of single osteopaths and should be further investigated.
Only a selection of statements is given in the following.
A rhythm of 10-14 cycles a minute was described by Magoun. This could correlate to the Traube-Hering oscillations.
A rhythm of 6 or rather 8-12 per minute was described by Becker and Upledger.
Jealous palpated a rhythm of 2.5 cycles per minute.
Becker also palpated a rhythm of 6-10 cycles in 10 minutes, which he called the slow tide. This could correlate to the Mayer-oscillations.
Liem palpated a cycle length of 5 minutes, which could also be confirmed through CT-scans. With the help of CT-scans one could also measure phasic movement patterns of the density of the brain and of the ventricular form with a cycle of 33 minutes.
Currently no written work exists about the palpation of this, lastly mentioned, rhythm. Some personal palpation experiences also seem to indicate very slow, expanding and retracting impulses, but these results are rather irregular, non-uniform and so far a continuous rhythm did not crystallize.

8.3
8.3.1-8.3.3
The phases of 'primary respiration' are called inspiration- and expiration phase. One can also find the terms "flexion – and extension phase" in literature. However, these reduce the processes to pure axial movement, not showing the importance of the expansion and retraction components of this rhythm.

There is an expansion during the inspiration phase with a natural disengagement, meaning that the structures gently separate. There is a retraction during the expiration phase where the tissues gently converge. This retraction is a movement toward the center, creating an increasing closeness of the tissues. It does not mean a retraction in the sense of an active compression, contraction or a reactive retraction, which inhibits the body's physiology. Those are rather the characteristics of a dysfunction.

The portrayed diagram gives further insight to the rhythmical processes of qualities and conditions, which arise during the primary respiration.

8.4.1
The transverse diameter of the skull should increase during the Inspiration phases, the anterior-posterior diameter should decrease, and the calvaria should sink (or lower itself). During the expiration phase the transverse diameter of the skull should decrease, the anterior-posterior diameter should increase, and the calvaria should rise.

A global variation of tension is also possible, a global expansion and retraction of the skull.

8.4.3.
In addition to the inherent movement of the brain and the fluctuation of the cerebrospinal fluid, the movement particulars in the biomechanical model are mainly determined through sutural surfaces, intra-osseous elasticity and dural membranous attachments. Magoun describes a movement transfer from the sphenobasilar synostosis onto the other bones, for example from the occipital bone via the jugular process onto the temporal bone. The occipital bone should affect the temporal bone, parietal bone and the mandible. The sphenoid bone should affect the rest of the bones of the skull. Currently, this depiction seems to be rather unlikely. However, the SBS, as a central osseous region in the skull, could be of great importance as a fulcrum and a region of concentration of information.
If more importance is attached to the intra-osseous elasticity, then an expansion and retraction in the entire skull and each of its skull bones seems more likely, - a movement that has less axial orientation.
Further functional centres of orientation are a dural fulcrum along the straight sinus (sinus rectus), a nervous fulcrum in the area of the lamina terminalis and a fluid fulcrum at the level of the third ventricle.
The following descriptions are hypothetic and a rough assumption of the inter-osseous and intra-osseous rhythmical tension- and movement variations existing in reality. They serve as a means to help our understanding or imagination of these phenomenons.

(occipital bone): The transverse axis for flexion movement should be located above the foramen magnum at the level of the jugular process. During inspiration the basilar part (pars basilaris) should move superior and slightly anterior and the superior part of the squama should move inferior and posterior.
:::
Intraosseous adaptation of the occipital bone to a global expansion and retraction of the skull
:::
(sphenoid bone):
The transverse axis of the flexion movement should be in front of the sella turcica. During the inspiration phase the posterior part of the body (corpus) should rise and the anterior portion should sink (or lower itself).
The transverse axis of this movement should be in front of the sella turcica. The greater wings (alae majores) do an external rotation. They move externally, anterior and inferior.
The pterygoid processes move posterior and lateral.

A movement at the SBS level is unlikely in adults.
A rhythmical variation of tension is more likely.

Intraosseous adaptation of the sphenoid bone to a global expansion and retraction of the skull.

(ethmoid bone): During the inspiration phase the crista galli should move superior-posterior and the posterior part of the ethmoid bone should move inferior. The posterior part of the ethmoidal cells should move lateral into an external rotation
:::
Intraosseous adaptation of the ethmoid bone to a global expansion and retraction of the skull.
:::
(vomer): During the inspiration phase the vomer should sink, the posterior part more than the anterior.

Intraosseous adaptation of the vomer to a global expansion and retraction of the skull.

(temporal bone): According to Magoun an axis should run from the petro-jugular suture to the tip of the petrous part. During inspiration the mastoid process should move posterior- medial and the mastoid part (pars mastoidea) should move anterior-lateral. The squama should move lateral, anterior and minimally inferior and the mandibular fossa should move posterior medial. A second anterior-posterior axis was also described, running through the condylo-squamo-mastoid and spheno-squamous pivot points.

Intraosseous adaptation of the temporal bone to a global expansion and retraction of the skull.

(frontal bone). Flexion should take place around a horizontal axis, external rotation around two vertical axis of movement. During the inspiration phase glabella should move posterior and superior. The forehead flattens. The lateral zygomatic processes move anterior, inferior and lateral, in the sense of an external rotation.

Intraosseous adaptation of the frontal bone to a global expansion and retraction of the skull.

(parietal bone): The axis should run through the anterior and posterior pivot point. During the inspiration phase the sagittal suture should sink, more in the posterior portion than in the anterior. The lateral rims move externally and lateral.

Intraosseous adaptation of the parietal bone to a global expansion and retraction of the skull.

(maxilla): External rotation should take place around two vertical axis along the frontal processes. The posterior portions of the alveolar processus get wider, the inter-maxillary suture moves posterior. The palate plate sinks.

Intraosseous adaptation of the maxilla to a global expansion and retraction of the skull.

(Palate bones): The palate plate lowers itself. The pyramidal process should move externally, inferior and posterior. The palate bone is also referred to as a speed reducer, since it mediates between the cranial base and the maxilla.

Intraosseous adaptation of the palate bone to a global expansion and retraction of the skull.

(zygomatic bone). The zygomatic bone acts as an integration place for the influences of the occipital bone, the sphenoid bone and the facial skull. A longitudinal rotational axis runs from posterior to anterior and from lateral to medial, and a vertical axis goes through the frontal process. The frontal process moves anterior lateral.
The maxillary process moves externally and anterior.

Intraosseous adaptation of the zygomatic bone to a global expansion and retraction of the skull.

(mandible):
The two axis of movement should pass through the first molar. The condylar processus move posterior medial, the angles move lateral, anterior and caudal. The tip of the chin moves posterior.

Intraosseous adaptation of the mandible to a global expansion and retraction of the skull.

The nasal bones perform an external rotation.

Intraosseous adaptation of the nasal bones to a global expansion and retraction of the skull.

The lacrimal bones perform an external rotation.

Intraosseous adaptation of the lacrimal bones to a global expansion and retraction of the skull.

8.4.4
During the inspiration phase the sacral base should move posterior and superior and the tip of the sacrum should move anterior and inferior.
During the expiration phase the base of the sacrum should move anterior and inferior and the tip of the sacrum should move posterior and superior.

8.4.5
During the inspiration phase the tentorium cerebelli should sink and the anterior-posterior diameter of the falx cerebri should decrease (shorten). In the expiration phase the tentorium cerebelli should rise and the anterior-posterior diameter of the falx cerebri should increase (lengthen).

8.5
It is important to have an individually adjusted height of the treatment table.
The feet must have a good contact with the floor. Feel the contact of the ischial tuberosity on the chair. We can gain a stable and relaxed upright body position by having a good contact with our feet and the ischial tuberosities. This guarantees a relaxed, natural awareness.
Relax your own body, especially the pelvic floor, solar plexus, the back, shoulders, the neck region, tongue and hands.
The more relaxed you are, the more perception you can perceive from the patient and the easier it will be for the patient to let go.
Feel how your lower legs and your spine elongate into the floor and become deeply rooted in the ground. Feel how your spine elongates above you head into the sky.

8.6
Slowly bring your hand toward the body part that you want to examine or treat. Sutherland uses the example of a bird getting close to a branch, then gently touching it and then settling down on it, to illustrate this gaining of contact with the tissue.
Whenever possible, support your elbows on the table or on your knees, so that they form a fulcrum.
Signalize trust and security to your patient with your hands. Should you palpate a specific region, make sure your positioning is exact. This is a prerequisite for efficient, successful treatment.

8.7.
Calvaria handhold according to Sutherland
Please note that whenever possible, you support your elbows on the table or on your knees.
Place your index fingers on the greater wings, directly posterior to the lateral edges of the eye. The middle fingers lye on the temporal bones, in front of the ear, the ring fingers on the temporal bones behind the ear. The little fingers are on the side at the level of the occipital bone.

If possible, the thumbs should touch each other above the skull, without touching the head. They act as a fulcrum or as a fix point. However, should this lead to a tension in the hand muscles, the thumbs do not have to touch.

First become aware of the swelling and subsiding of the skull during the primary respiration. During the inspiration phase there is an expansion, in the expiration phase the structures converge. According to Magoun there is an increase in the transverse diameter of the skull and a sinking of the calvaria, biomechanically, during the inspiration phase, and in the expiration phase a decrease in diameter and a rising of the calvaria. As you gain experience, you can differentiate the tension-, density-, elasticity-and movement qualities under each individual finger. Deeper layers of tissue also become perceptible.

Occipito-sphenoidal palpation according to Becker
Place your thumbs onto the greater wings directly posterior to the lateral edge of the eye. The index fingers are on the mastoid processes, the middle fingers are on the mastoid portions. The ring fingers are placed posterior to the occipito-mastoid suture on the occipital bone and the little fingers onto the occipital squama.

Occipito-sphenoidal palpation according to Upledger
Place both thumbs onto the greater wings and the little fingers and ring fingers onto the occipital squama on both sides.

Spheno-occipital palpation according to Magoun
Take hold of the greater wings with the thumbs and middle fingers or index fingers.
The bottom hand takes the occipital bone into the palm of the hand, the fingers point laterally.

Fronto-occipital palpation according to Sutherland
Place the top hand onto the frontal bone; the middle finger on the metopic suture, above nasion, the ring- and index fingers next to it.
The bottom hand takes hold of the occipital bone with the palm of the hand. The fingers point caudally.