CORE
CENTERS FOR OSTEOPATHIC RESEARCH AND EDUCATION

OHIO UNIVERSITY
College of Osteopathic Medicine

Osteopathic Considerations for the Evaluation & Treatment of the Sacrum – The Post-Partum Female

Developed for OUCOM CORE
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and the
CORE Osteopathic Principles and Practices Committee

Series B - Session #2 Sacrum

Post-Partum Case

28 year old woman, presenting for post-partum visit

- P1G1
- 6 weeks post-partum
- Lumbo-sacral pain – central
  - Radiating laterally along the belt line
  - No lower extremity radiation of symptoms

Ongoing pelvic pain:

- Episiotomy scar also painful
- Constipation
- No urge incontinence

Pain worse:

- When nursing - uterine contractions every time milk lets down
- With prolonged standing or sitting

Experiencing post-partum depression:

- Daily tearfulness
- No suicidal or homicidal ideation
- Able to care for the baby
- Has lost interest in other activities

Medications:

- Motrin
- Vitamin supplement

Exam:

- Neurological exam negative for abnormalities
- Episiotomy well healed, but moderately tender to palpation
- Gyn exam: consistent with 6 weeks post-partum

OSCE Owl says...

INTEGRATE:

Orthopedic
Neurologic
&
Structural

EXAMS

Associated Osteopathic Findings

- Bilaterally Flexed Sacrum
- Bilateral innominate outflare
- Bilateral ribs 10-12 inhalation preference
- T12 ERISl
- T6-9 Flexed
- Bilateral Occipitomastoid Compression
- Superior Vertical Strain at the sphenobasilar symphysis

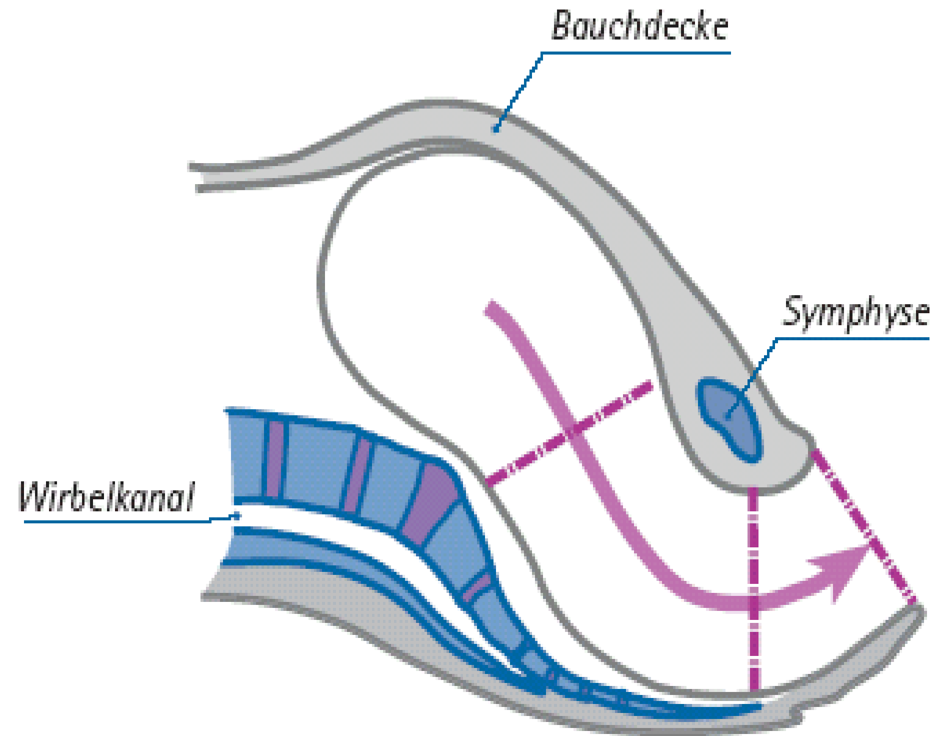
Differential Diagnosis

- Post-partum depression
- Lumbosacral-pelvic Pain
- Somatic Dysfunction of the Sacrum, Pelvis, Thoracic, Rib and Head regions

Entrance into the Pelvic Inlet

- There is potential to get direct trauma from pubic contact and associated pressures.

- Sacral dysfunction can influence the process at this point.



Slides courtesy of the Deutsche Gesellshaft fur Osteopathische Medizin

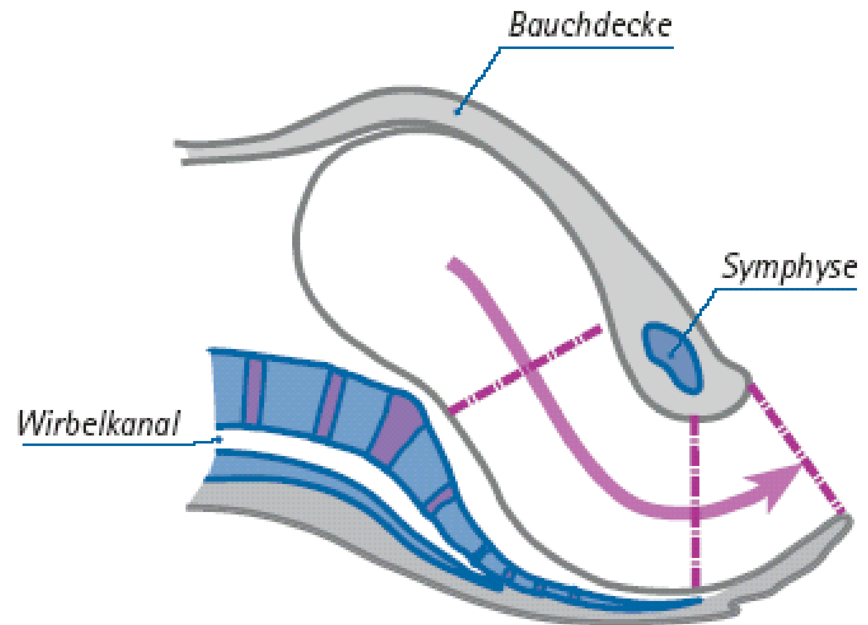
Descent

– Proceeds along an axis from the navel to the coccyx

– The coccyx lies in dorsal pernium with descent

– The head rotates and extended as it leaves the outlet

– The sacrum needs to flex to optimize space for the head at the outlet
  - With pushing and straining sacral dysfunction can occur



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Depressed Sacrum

'The relaxed pelvic ligaments and pendulous abdomen incident to pregnancy… set the stage sacral sag'.
(Magoun, p. 143)

Simultaneously the Sacrum drops caudally, encouraged by:

- Vacuum extraction, Forceps, also precipitoust Labor
- Prolonged back labor
- Birth assistant pushes from above on the maternal abdomen to assist birth

Depressed Sacrum

Physiologic Nutation of the Sacrum is exceeded

(Sacrum anterior bilateral)

- The sacral base is far forward between the ilia and the apex is back
- 'Relative locking occurs because the ligaments draw the ilia together and the rough articular surface tends to prevent a return to normal.'

A bilateral flexed sacrum and attendant fascial restrictions 'can result in a double occipitomastoid dysfunction.'

- 'Invites serious mental complications, especially with the menses or during an ensuing pregnancy.'

(Magoun, p. 143)

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Depressed Sacrum

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Findings:

- Sacrum in Nutation and Inferior (Restriction of superior motion; Bilaterally Flexed)
- Massive strain on the spinal Dura with Occiput in Extension
- Sphenobasilar symphysis in Vertical Strain superior

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Depressed (Anterior) Sacrum

Treatment

Patient: seated on the side of the table

Doctor – on a stool facing the patient:

- Thumbs: introduced over the high point of the crests of the ilia directed
  - Posterior, medial, inferior
  - Visualize their direction toward the sacral base

Depressed (Anterior) Sacrum

Patient:

- Rests her forearms on the doctor's shoulders
- Have the patient take a deep inhalation, then

With **exhalation** she:

- Flexes the lumbar spine
- Flexes the chin on the chest
- Supports some of her weight on her forearms

Pt. **holds exhalation** as long as possible

Doctor:

- Follows sacral base posterior during inhalation
- Holds it toward posterior positioning during exhalation & forward bending of the patient

Depressed (Anterior) Sacrum

At the moment of Inhalation:

She lifts head & shoulders

– Helps augment deep inhalation

Maintains moderate lumbar flexion

- The technique may be repeated until sacral base goes no further posterior, if incomplete release occurs with the first held exhalation.

***Patient Homework*:**

- Cat Stretch Exercise coordinated with breathing and abdominal muscle retraction during the exhalation phase

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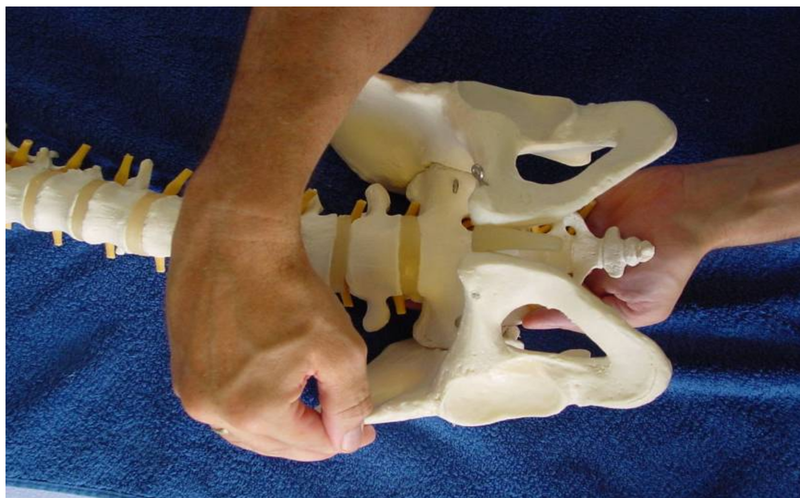
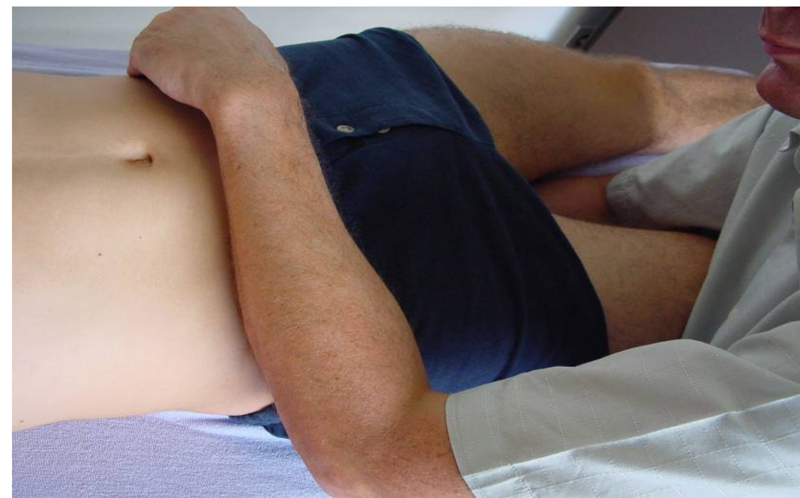
Bilateral Sacroiliac Treatment – Supine





***Alternatively, treat sacroiliac joints simultaneously*:**

1. Gap gently using finger and forearm contacts
2. Take the sacrum and, to a lesser degree, the two innominates in directions of ease (Those motions easily accomplished from this handhold – rotations or translations)

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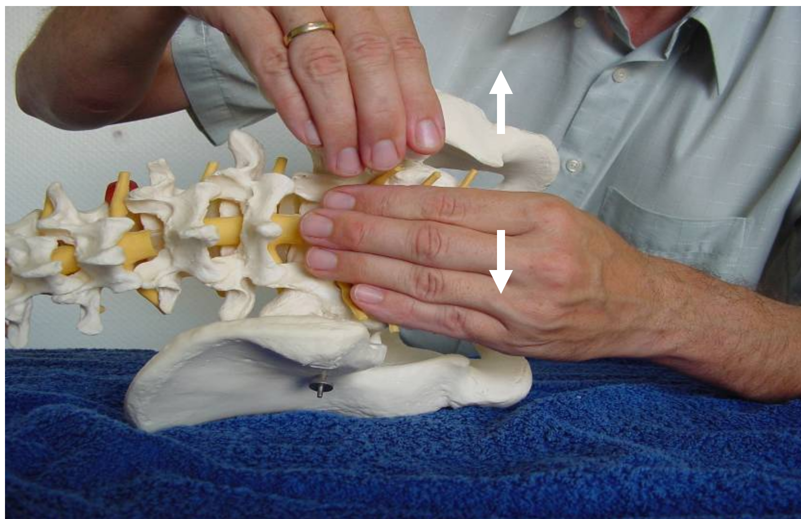
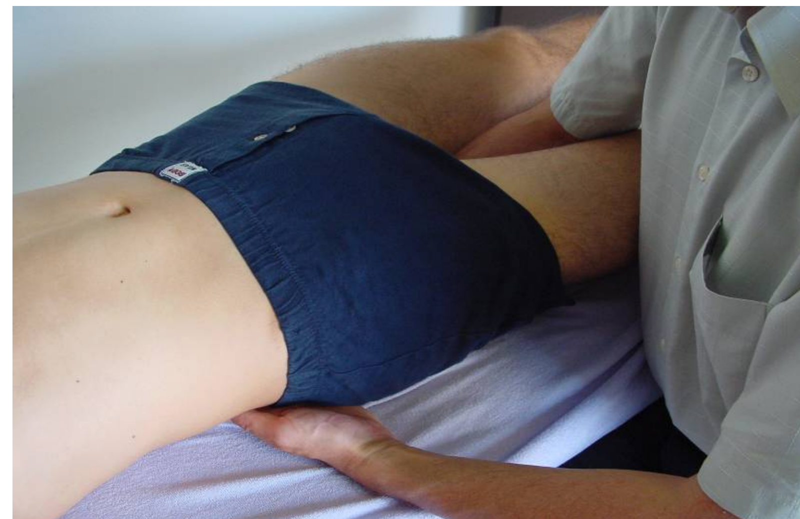
Unilateral Sacroiliac Treatment - Supine





***Alternatively, treat one sacroiliac joint at a time*:**

1. Gap gently
2. Take the sacrum and the innominate each in its directions of ease (Those motions easily accomplished from this handhold – rotations or translations)

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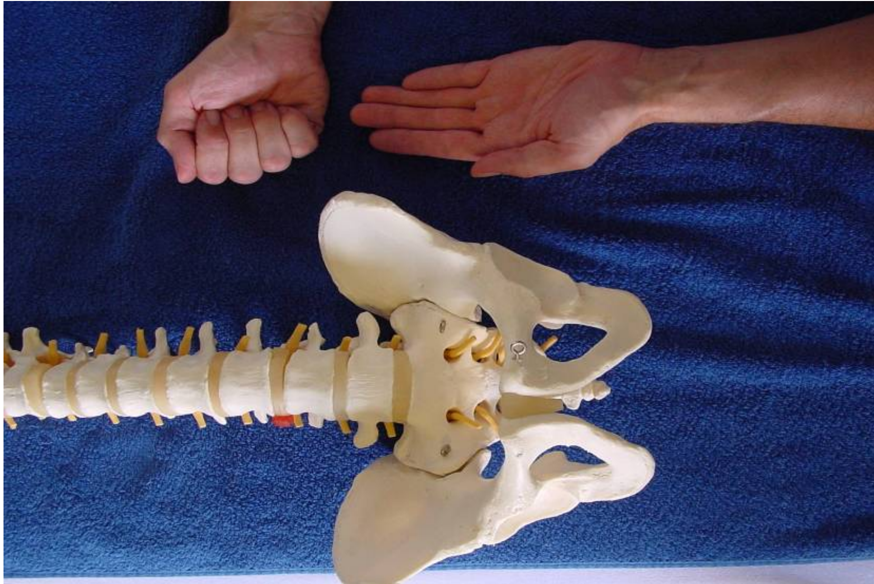
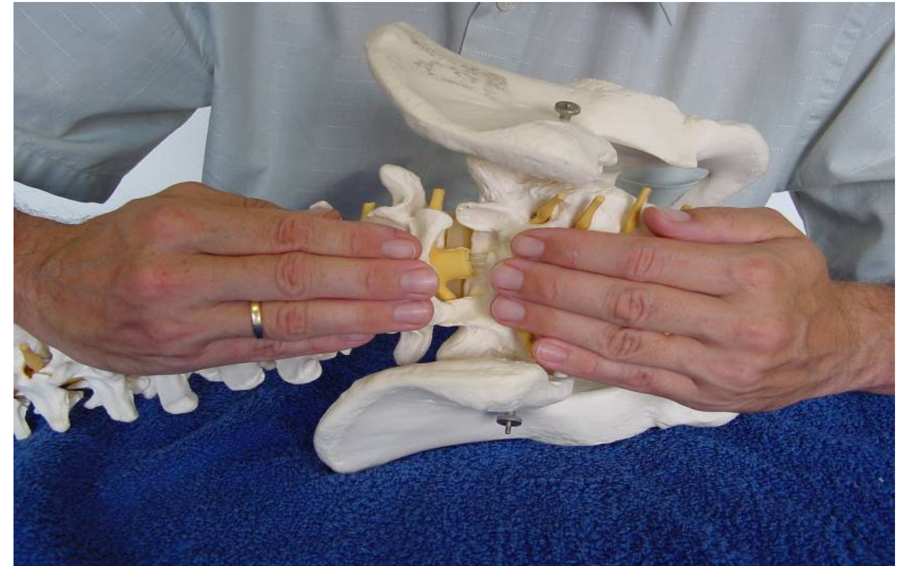
Lumbosacral Decompression





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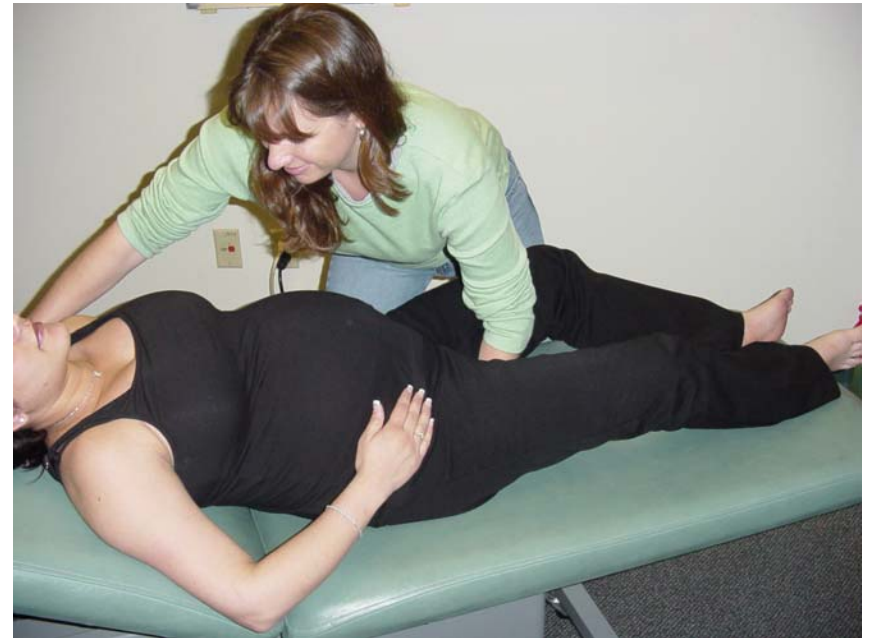
Preceding treatments also address the secondary bilateral innominate outflare

Frog Technique

- Pt supine, stand to side of patient
- Place caudal hand under sacrum
- Flex hips and knees, knees apart, feet together
- Apply traction on base of sacrum and pull apex forward
- Have pt rapidly kick legs straight
- As legs are extended, pull sacrum inferiorly

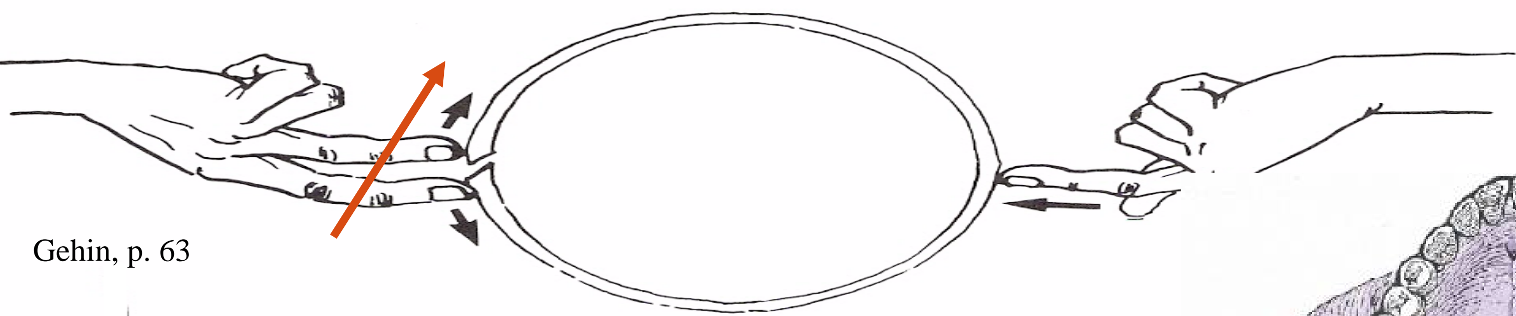
Frog Technique

Pull sacrum inferiorly while legs rapidly extended (kick)



Other Non-sacral Treatment Considerations for this Patient

- V-Spread for the Bilateral Occipitomastoid compression
- Indirect Ligamentous articular release for the vertical strain
- Muscle Energy or HVLA for thoracic dysfunctions
- Check & Treat the Pelvic Diaphragm, if needed
- Balance the Thoracolumbar Diaphragm
- Fascial-ligamentous Complex Treatment (can be integrative at the end of the treatment sequence

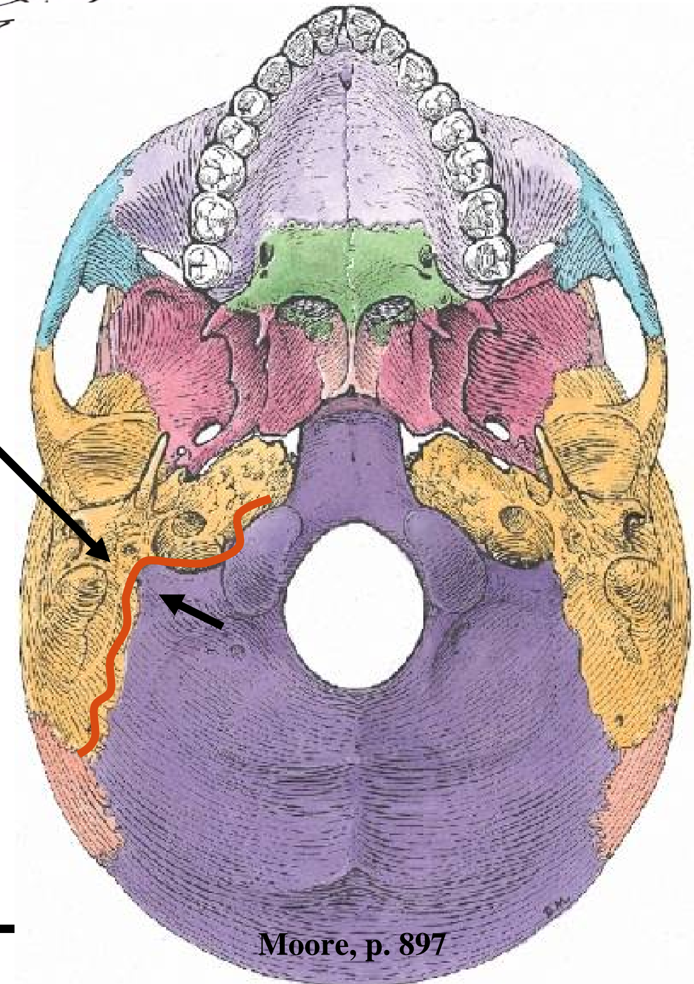


Gehin, p. 63

V-Spread: applied gently to each Occipimastoid Suture

Create a gentle fluid wave from the opposite frontal eminence

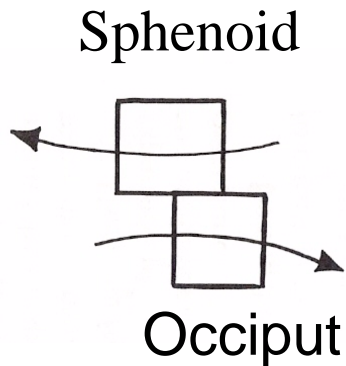
- If not sure where to place finger
  - Press gently at occipitomastoid toward the opposite frontal. Where do you feel the pulse? Generate the fluid wave from there.



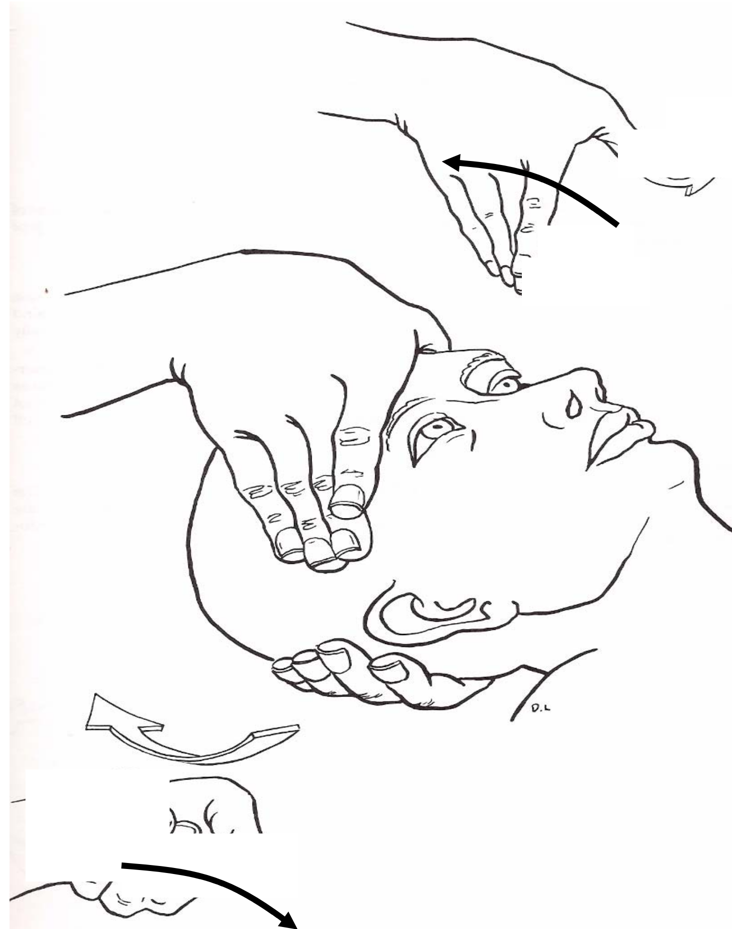
Moore, p. 897

Superior Vertical Strain

Sphenoid



Occiput



- Treat using the fronto-occipital hold
- Use indirect to the point of balanced membranous tension

Gehin, p. 35, 37

The Pregnant Patient

Pelvic Diaphragm

Pelvic diaphragm
Pubic symphysis
Levator ani
Puborectalis
Pubococcygeus
Iliococcygeus
Coccygeus
Sacroiliac joint
Urogenital hiatus
Perineal body
Ischial tuberosity
External anal sphincter
Anococcygeal ligament (body)
Sacrospinous ligament

- **Point of contact via the ischiorectal fossa for the pelvic diaphragm for purposes of monitoring and synchronization**

Moore, Clinically Oriented Anatomy, 4th Edition, 1999, p.399

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The Pregnant Patient

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- Looking forward from the posterior right aspect

- View of the ischiorectal fossa
- Reasonably direct access to one hemi-diaphragm of the pelvic diaphragm.

Moore, Clinically Oriented Anatomy, 4th Edition, 1999, p.400

Treatment of the Diaphragms

Pelvic Diaphragm

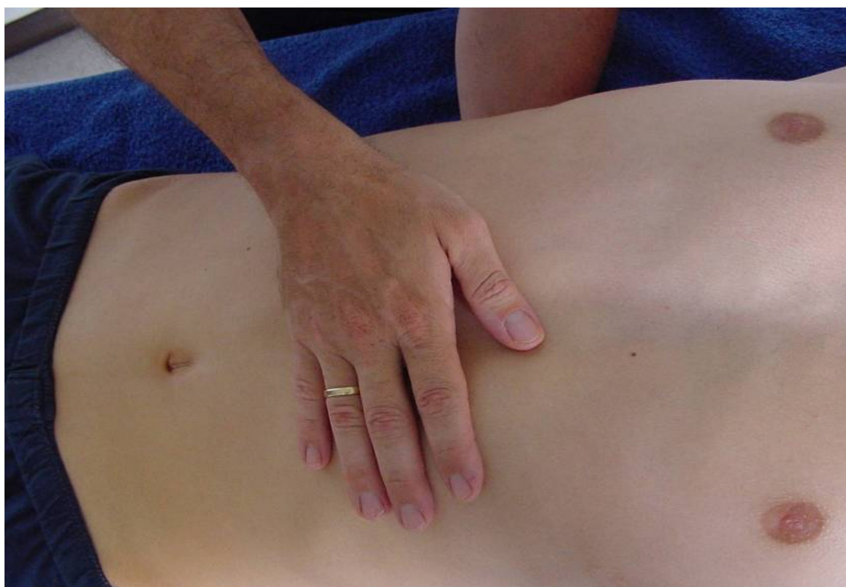
Supine Treatment via the ischiorectal fossa

Pelvic Diaphragm

Lateral recumbant Treatment via the ischiorectal fossa

Diaphragm Treatment

Thoracolumbar Diaphragm



- By contacting ribs 10-12 posteriorly the patient in the case with inhalation preference can be addressed.

Treament of the diaphragm:

- Works directly on all adjoining abdominal & thoracic organs.
- Improves venous an lymphatic return
- Eases pulmonary respiration
- Techniques alreay familiar to you can also be used throughout the phases of pregnancy

Fascial-ligamentous Complex Treatment

Patient: Hands on shoulders of the physician and rests the head against the chest/or shoulder

Physician:

- Stands in front of the patient
- Arms under the patient's axillae and below the scapulae
- Hands contact the diagnosed dysfunction: spinal or rib
- Use rotation and/or translation motions toward ease

Slides courtesy of the Deutsche Gesellshaft fur Osteopathische Medizin

Fascial-ligamentous Complex Treatment

Engage the free directions and /or barriers with

Tension – Traction – Twist

Treatment can be direct or indirect unwinding or combined

3-dimensional - Unwinding of the trunk (axial spine) can be accomplished

Good for integrating the treatment for the entire spine

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