

Breastfeeding Problems?:

Enter Physical Therapy!






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Objectives:

By the end of the presentation, the learner should be able to:

1. Discuss three types of breastfeeding difficulties that can be improved by a physical therapy intervention
2. Describe the tongue, jaw, and upper body movements necessary for an effective latch and suck function
3. Explain how mechanical irritations to the nervous system can be the result of musculoskeletal issues in an infant which interfere with proper breastfeeding.



**Breastfeeding Rehabilitation?
Breastfeeding Treatment?
at a Pain Rehabilitation Program?**




The Story:
There was (and still is) this Lactation Consultant.....



Physical Therapy can Address:

- Consistently poor latching
 - Shallow Latching
 - Milk Leaking during feedings
 - Poor Mandibular opening
- Poor Suck Strength
 - Can feed better with bottle
 - Still requiring finger feeding facilitation
 - Maladaptive tongue use
 - Myofascial dysfunctions of the:
 - Tongue and sublingual musculature



Physical Therapy can Address:

- Persistent Pain during Breastfeeding despite Pediatrician/ Lactation Consultant/ Surgical interventions
 - Education
 - Positioning
 - Ankyloglossia
 - Anterior Tongue Tie
 - Posterior Tongue Tie
 - Frenulectomy / Frenulotomy
 - Reattached lingual frenulum
 - Posterior Tongue-Tie
 - Lip Tie



Physical Therapy can Address:

- Inadequate weight gains
 - Inadequate feeding duration
 - Inadequate Milk Transfer
- Less than Robust
 - Sucking reflex
 - Sucking strength
- Overly sensitive gag reflex



Physical Therapy can Address:

- Torticollis
 - Which interferes with breastfeeding



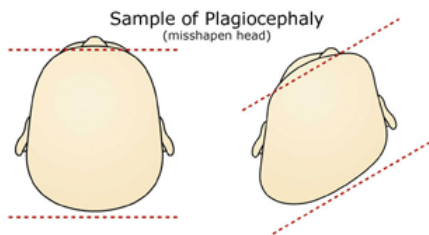
The Head/ Neck is preferentially tilted and/ or turned to one side

Shortened or Tense Muscle



Physical Therapy can Address:

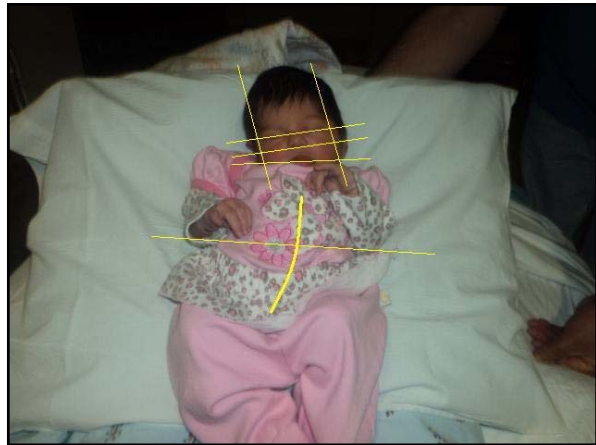
- Plagiocephaly
 - Which is commonly associated with Torticollis



Sample of Plagiocephaly (misshapen head)









Physical Therapy can Address:

■ Prenatal Biomechanics:

- Of the mother
 - PT normally gets involved when the mother experiences pain or other neuromusculoskeletal dysfunctions during her pregnancy
 - But not usually.....
- The fetus



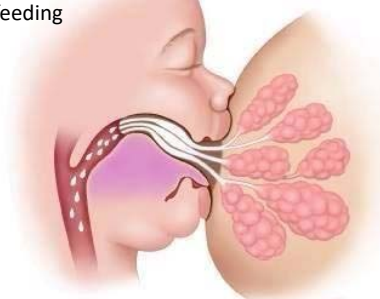
Physical Therapy can Address: (But Rarely has the opportunity)

■ Fetal Malposition Syndrome



Jaw, Tongue, and Suck Function


- Normal tongue and jaw utilization during Breastfeeding



Normal tongue position


Jaw, Tongue, and Suck Function

- Common abnormal jaw function
 - The “shallow latch”
 - “Tight” jaw – can’t open sufficiently wide
 - Clamping/ Pinching/ Pain
 - Easier Breastfeeding or clamping on one side – think “axial skeleton”
 - Flattened / Blanched Nipples
 - Vasospasm




Jaw, Tongue, and Suck Function

- Abnormal tongue utilization during Breastfeeding


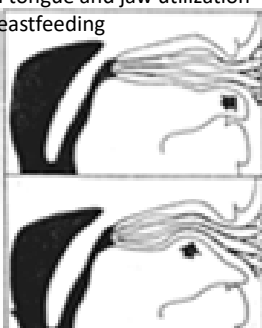


Tongue-tie



Jaw, Tongue, and Suck Function

- Abnormal tongue and jaw utilization during Breastfeeding



Jaw, Tongue, and Suck Function

- Normal jaw utilization during breastfeeding
- **The Jaw most commonly “follows the tongue movements and brain stem neural dynamics”**
- More on neural dynamics later

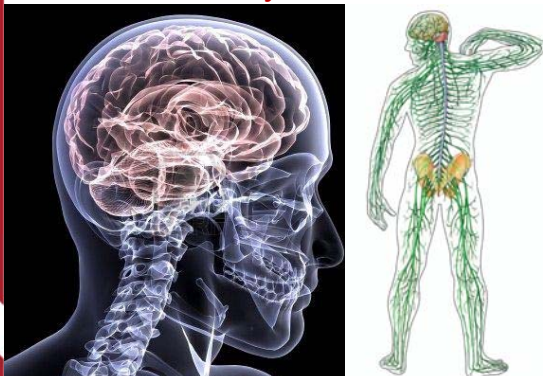


Jaw, Tongue, and Suck Function

- Normal body mobility necessary for effective latch and suck function includes:
 - **Cervical Spine Mobility**
 - Rotation – R to L
 - Lateral Flexion – R to L
 - Rotation with flexion
 - Spinal segmental mobility
 - Normal upper C-spine muscle tone



Neural Dynamics

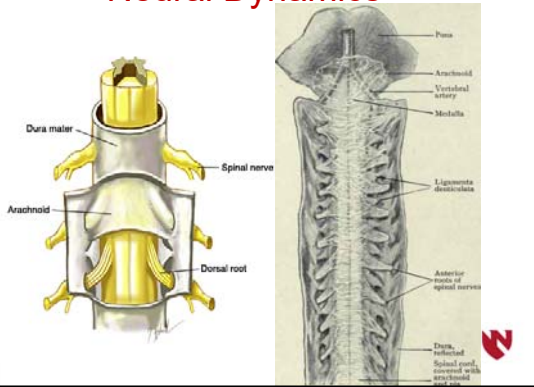


Jaw, Tongue, and Suck Function

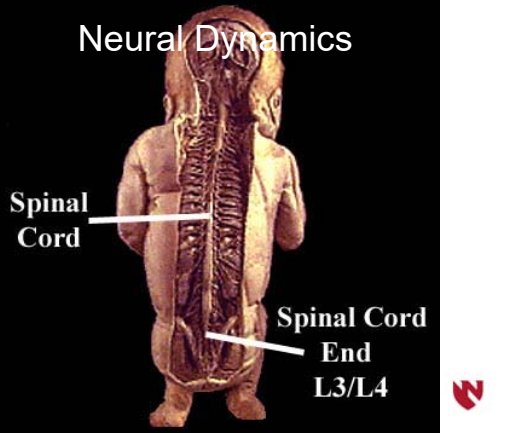
- **NEURAL DYNAMICS** needed for effective latch and suck function:
 - Spinal Dura mobility/ extensibility
 - Neuraxis mobility/ extensibility
 - Cauda Equina/ Filum terminale
 - Upper Limbs
 - Lower Limbs

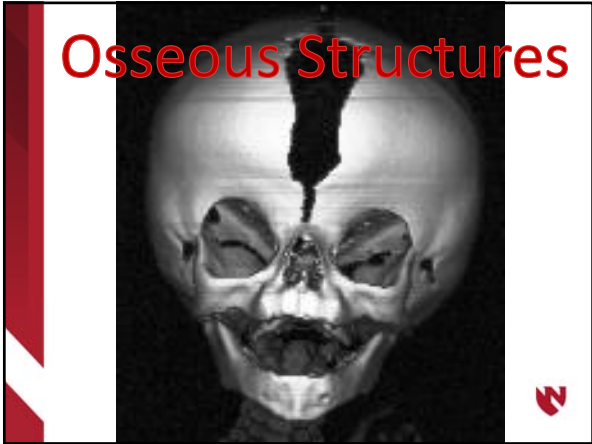


Neural Dynamics



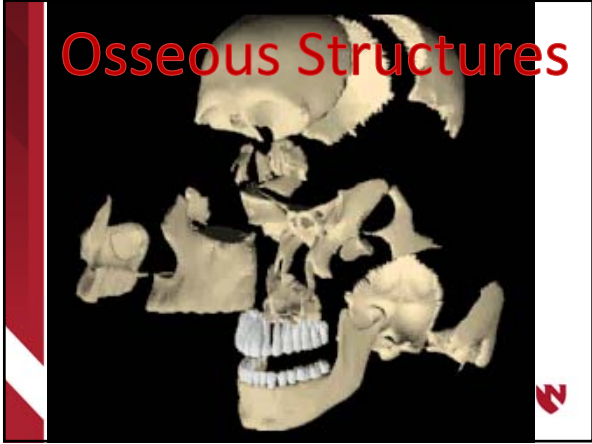
Neural Dynamics



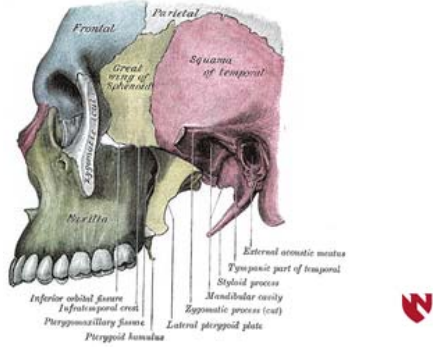


Jaw, Tongue, and Suck Function

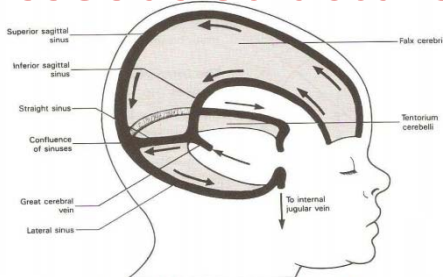
- **OSSEOUS RESTRICTIONS** Involve:
 - Loss of mobility between bony structures
 - Sphenoid/ Occiput
 - Sphenoid/ Maxillae
 - Occiput/ C1
 - Loss of the flexibility of living bone



Osseous Structures



Osseous Structures




Cross-section of the fetal skull intracranial membranes and sinuses

Jaw, Tongue, and Suck Function


- **OSSEOUS RESTRICTIONS**
 - **INTERFERE** with the mobility, extensibility, and motility of the neuraxis
 - The cranio-cervical junction
 - The cranial base
 - The maxillae

Jaw, Tongue, and Suck Function

- **OSSEOUS RESTRICTIONS** cause:
 - Losses of c-spine Range of Motion (ROM)
 - Increases in c-spine muscle tension/ tone
 - Losses of c-spine segmental mobility
 - Interference in mandibular opening
 - Losses of neuraxis mobility/ extensibility
 - Interference of brain stem control of SSB
 - Increased Jaw muscle tension
 - Excitability of the gag reflex



Jaw, Tongue, and Suck Function
The use of Cranial Osteopathic interventions




Jaw, Tongue, and Suck Function

- Ankyloglossia




Jaw, Tongue, and Suck Function

- **Ankyloglossia**
 - Definition
 - Clinical considerations:
 - Tongue function
 - SSB sequence/ mechanics
 - Mandibular opening/ maladaptive latching during breastfeeding




Jaw, Tongue, and Suck Function

- **Ankyloglossia**
 - Degrees of frenulum shortness/ extensibility
 - Clinical considerations:
 - Referral to MD/ DDS for surgical consultation
 - Post-Frenulotomy care
 - Not all surgeons provide instructions



Jaw, Tongue, and Suck Function

- **Ankyloglossia**
 - Re-attached and shortened lingual frenulum
 - Referral back to MD, DDS, or Surgeon for review
 - Parental preferences
 - Physical Therapy
 - Instructions, treatment, and follow-up
 - With or without frenulotomy revision



Jaw, Tongue, and Suck Function

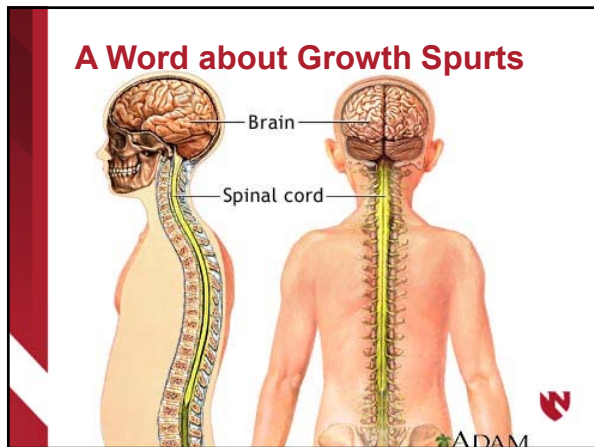
- Lip-Tie(s)

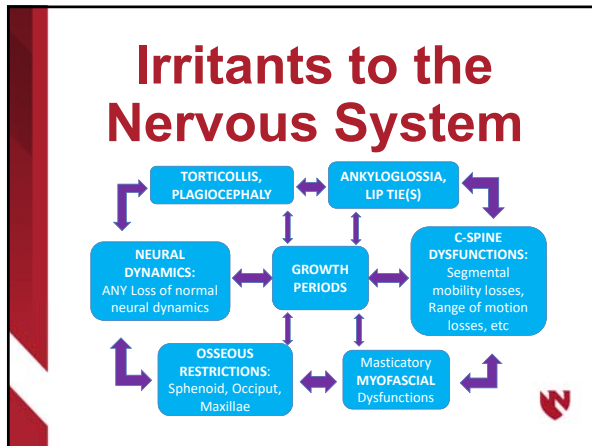


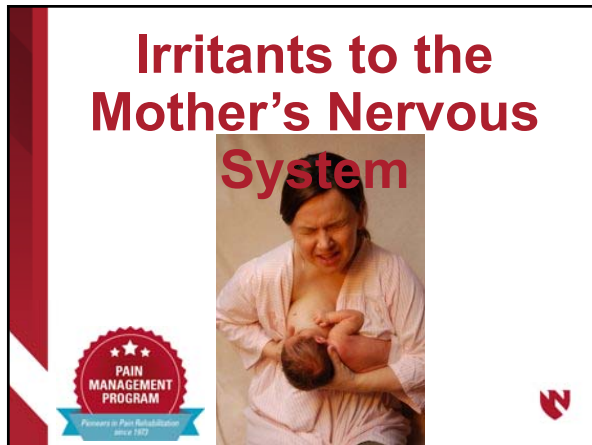
A Word about Growth Spurts



A Word about Growth Spurts







- ## Cases
- A case of meningitis
 - A case of growth periods
 - A case of unconfirmed ankyloglossia
 - A case of undiagnosed Tongue-tie
 - A case of reattached Tongue-tie
 - A case of cranial restrictions
 - A case of Mother's Hyper-sensitive Nervous system
 - A case of infant behaviors as the breastfeeding barrier
 - A case of parental behaviors as the breastfeeding barrier

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QUESTIONS?



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