05

Spinal Galant Reflex

05

Spinal Galant Reflex

- The Spinal Galant Reflex is associated with assisting during a vaginal birth, along with the ATNR. In infants, stimuli provided to the lower back will produce movement of the spine and hip away from the stimuli.

05

Spinal Galant Reflex

- The Spinal Galant Reflex emerges in-utero, at approximately *20 weeks after conception*.
- It is typically inhibited / integrated by *3-9 months after birth*.
- The Spinal Galant Reflex is triggered by stimulus provided to either side of the spine. This stimulation causes *movement in the hips*, and potentially *a head turn*, towards the side of the stimulus.

Why is it important?

05

Spinal Galant Reflex

- It is believed that the **Spinal Galant Reflex** plays a part in the birthing process.
- Contractions provide stimulus to the back, thus causing a hip rotation / movement.
- This also activates the **ATNR** (due to the head turn).
- These movements assist with movement down the birth canal.
- This reflex should be present with *equal strength* on both sides of the spine / body.
- May act as a primitive conductor of sound (bone conduction up and down the spinal column) in utero

Spinal Galant Reflex

- **If the Spinal Galant Reflex is *retained* (meaning, it does not integrate, or go away, naturally), some signs / symptoms may look like:**

  Urination when stimulus is provided to either / both sides of the spine.

  Poor bladder control, particularly bed wetting after the age of 5.

  Irritable Bowel Syndrome.

  Difficulty sitting still. "Ants in the pants."

  Dislike of tight clothing.

  Challenges with short-term memory and concentration.

Spinal Galant Reflex

- If the Spinal Galant Reflex is only present on one side of the body, challenges can occur with:

Rolling as an infant.

Posture.

Gait / locomotion.

Potential for scoliosis.

Fluidity and mobility during physical activities.

05

Spinal Galant Reflex

EVIDANCE BASED TESTS OF RETAINED **ATNR** REFLEX FROM OCCUPATIONAL THERAPY POV.

OBSERVE THE PRESNTER.

Spinal Galant Reflex

- ***Snow Angel and / or Sit Walk exercise .***

  Joint compressions / traction to joints and muscles.

  Back massage.

  Deep touch pressure (such as the Wilbarger Brushing Protocol).

  Vibration.

07

Rooting reflex.

08

Sucking reflex.

The Rooting Reflex is important in helping an infant locate food. You will notice it in a newborn if you brush your finger down one side of the mouth.

The baby will turn toward the stroke and open the mouth.

This is normal and should be gone by about 4 months.

If it is not properly integrated, it can contribute to speech disorders, eating problems and other health issues.

The Rooting Reflex is closely related to the Palmar Reflex.

Because these reflexes are so closely related, the hand and mouth can affect each other. For example, these retained reflexes can cause speech problems when using their hand, such as writing, or poor penmanship when chewing gum.

You may have seen this connection in an infant that twitches their curled up hands while sucking a bottle.

Why is it important?

- are the first practice ground for sensory and motor Reflexes and the Developing Mind
- Ensures early feeding;
- Improve visual motor skills
- May help to develop the muscle groups involved in smiling
- Improve breathing through the nose
- employed in vocalization and speech

Retained Rooting Reflex Symptoms:

Tongue lies too far forward

Hyper sensitive around mouth

Difficulty with textures and solid foods

Thumb sucking

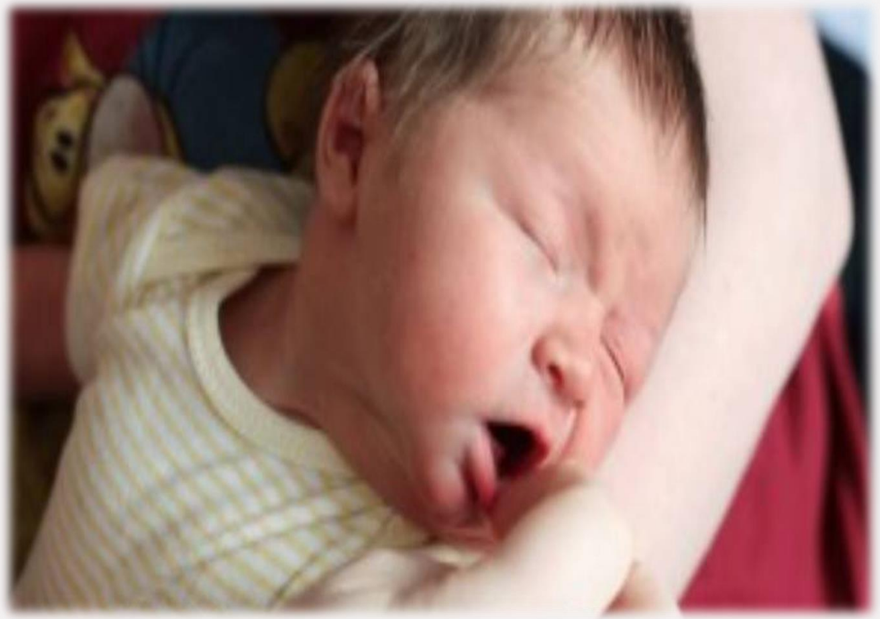
Speech and articulation problems

Difficulty swallowing and chewing

Dribbling

07

Rooting reflex.



EVIDANCE BASED TESTS OF RETAINED **ATNR** REFLEX FROM OCCUPATIONAL THERAPY POV.

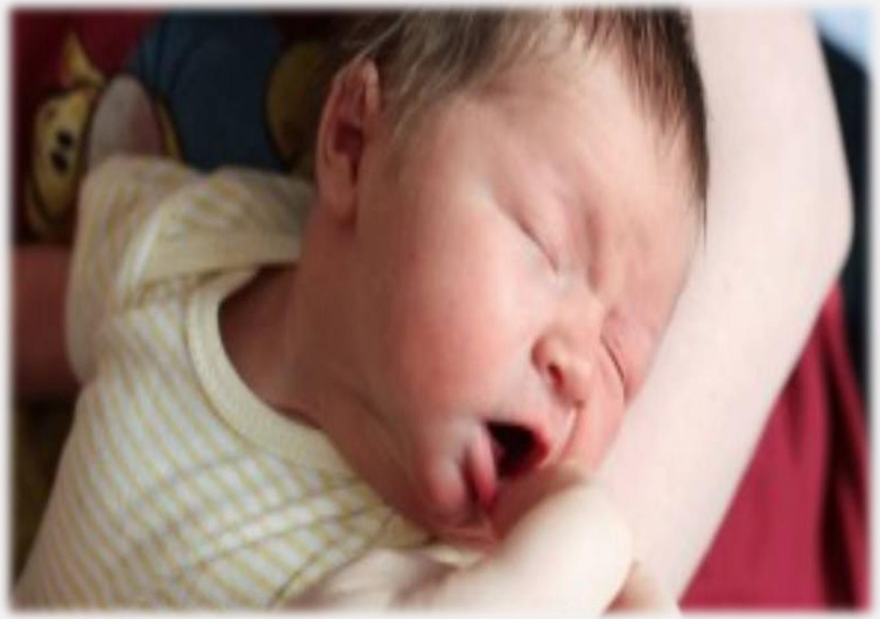
OBSERVE THE PRESNTER.

- Stroke down around one side of the child’s mouth from nose to chin horizontally and vertically.

- Putting olives or candy and try to manipulate it

07

Rooting reflex.



Watch how the presenter will do each of the activity in detail and listen to the protocol of each of reflex.

06

Palmar Grasp Reflex

06

Palmar Grasp Reflex

- The Palmar Grasp Reflex is an involuntary response to stimuli on the palm of the hand. This assists a newborn with grasping objects before they actually do so on purpose.
- The Palmar Grasp Reflex develops roughly between 11-16 weeks in utero.
- The Palmar Grasp Reflex should be integrated - not present - by no later than six months of age - the age when an infant begins to intentionally grasp objects.

06

Palmar Grasp Reflex

- The **Palmar Reflex** is seen when an infant grips around an object that touches their palm. This is normal in infancy and helps the baby **learn to grip** and hang on to things with their hands. The Palmar Reflex should disappear at around **3-6 months** of age as they gain hand control. If it isn’t properly integrated it can cause an array of problems

Why is it important?

- ❖Create the emotional bond between baby and parents.
- ❖Stabilize the objects in hands , such as a toy.
- ❖Help the baby to grasp his / her mother and prevent from falling.
- ❖Build the foundation of fine motor skills.
- ❖Improve the hand eye coordination.

Remember always there is a link between the mouth (head in general) – hand – foot

06

Palmar Grasp Reflex

Retained Palmar Reflex Symptoms:

- Poor dexterity
- Poor fine motor skills
- Slumpy posture when using hands
- Back aches when sitting
- Messy handwriting and poor pencil grip
- Sticks tongue out when using hands
- Poor ability to put thoughts to paper
- Dysgraphia
- Speech and language problems
- Anger control issues

06

Palmar Grasp Reflex

EVIDANCE BASED TESTS OF RETAINED **ATNR** REFLEX FROM OCCUPATIONAL THERAPY POV.

OBSERVE THE PRESNTER.

06

Palmar Grasp Reflex

Watch how the presenter will do each of the activity in detail and listen to the protocol of each of reflex.

09

Babinski reflex.

The Babinski reflex appears at approximately one week of life.

Pressure applied to the outside edge of the foot results in extension of the great toe and fanning of the other toes.

In other words , the Babinski reflex is an extensor reaction.

It remains active for at least the first year of life and may not be completely inhibited until two years of age, when the same stimulus will result in slight flexion of the toes toward the applied pressure.

Inhibition of the Babinski reflex occurs with maturation of the corticospinal tract but is released in specific cases of progressive pathology such as multiple sclerosis. (The Corticospinal tract is the pathway which runs directly from the motor area of the cortex to the part of the body which it controls.)

Functions

- Thought to play a part in inhibiting the Plantar grasp reflex;
- Should be present when the baby learns to ‘commando’ crawl, in order to embed the toes into the ground and push with the feet.

Effects if retained

- Indicative of pathology in the upper pyramidal (corticospinal) tract. Re-emerges in multiple sclerosis;

- May be temporarily released under conditions of hypoglycaemia, only to disappear within 15 minutes of glucose administration;

BUT THE MAIN SUMPTOM IS :

- Affects muscles at the back of the legs SO affecting gait.