STNR - Symmetrical Tonic Neck Reflex

Theory, Diagnosis, Treatment, HEP

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Theory

Spinal Level Reflex (Brainstem)

- Prone on elbows

- Emergence: 13th week Gestation
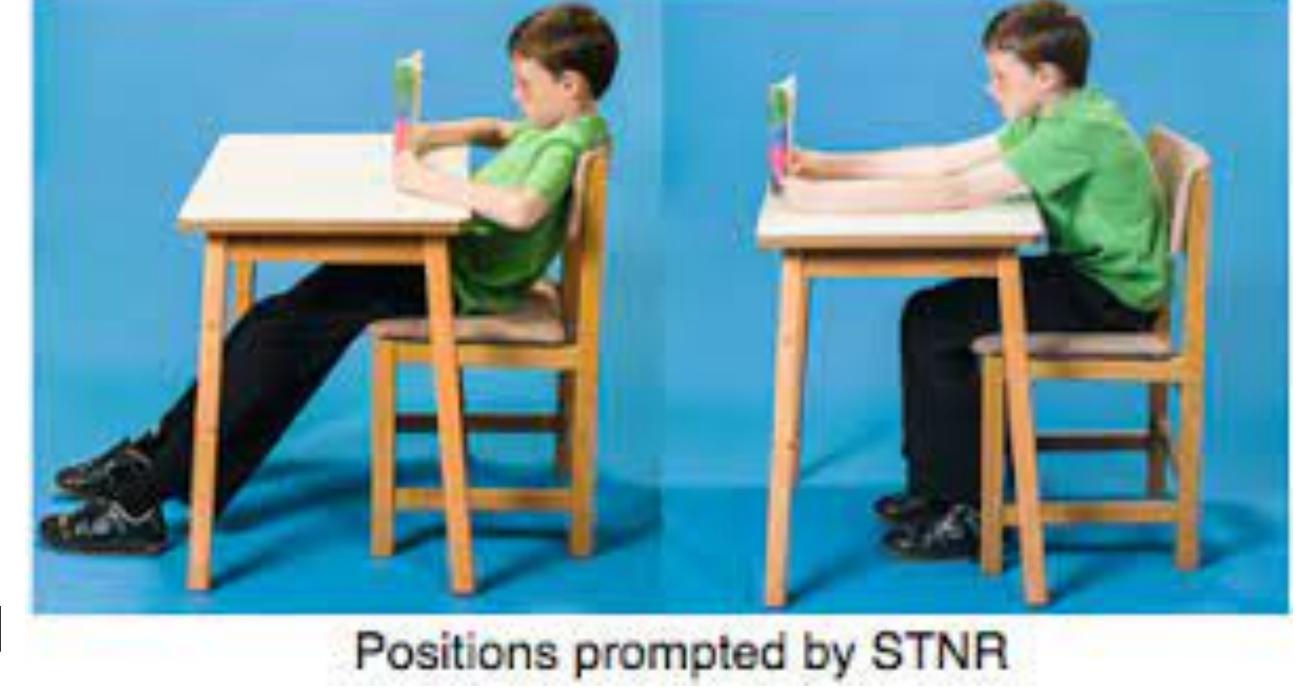
- Integration: 10 months

Other

- CDC no longer calling crawling a milestone

- Crawling provides:

  - Stability through shoulders

  - Stability through hips

  - Neck extension: Visual horizon, scanning for reading

  - Integration of Galant, Babkin, ATNR

  - Cross lateral movements

  - W-sitting

Diagnosis

- Whole body movement coordination

- Retained STNR

  - Kids have to bend knees when elbows are straight

  - When legs are bent, arms have to be straight

- REFERENCES

- 4. Parent Handbook: Symptoms and Developmental Delays

- 5. The Rhythmic Movement Method

Positions prompted by STNR

3. https://www.wholebrainliving.com/2015/12/understanding-retained-infant-reflexes.html
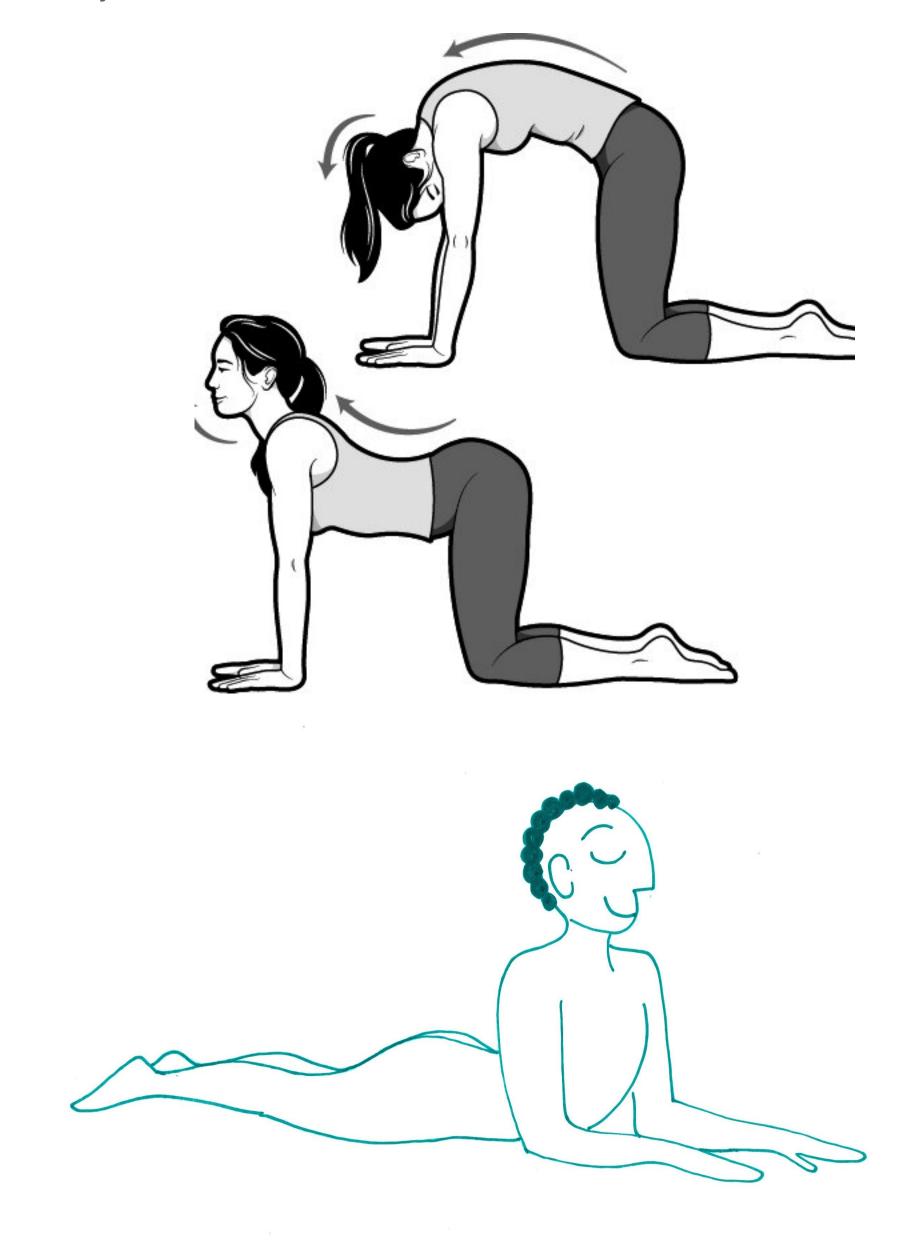
Treatment

- Sensory: Visual horizon stimulus

- Motor: Head extends with elongation of neck

- Putting the person in position and providing a proprioceptive input to head

- Vestibular - initial development of 45 degree canal

- Proprioception - Shoulder and hip socket stability

- Vision - Finding Horizon

Home Program
Integrating STNR

- CAT/COW, move into and hold for 7 seconds 5 sets

- Prone on elbows, attempt to hold position for up to 20 minutes. Start at 30 seconds and build.

- Building the shoulders/hips

- Crawling

References

1. The New York Times, 2020, Rest Better with Light Exercise. https://www.nytimes.com/2020/10/10/at-home/exercises-for-better-sleep.html

2. YoreMi, 2022, Sphinx Pose for Kids: Gentle Beginner Backbend. https://www.yoremikids.com/news/sphinx-pose-kids-yoga

3. Whole Brain Living, 2015, Understanding Retained Primitive Reflexes. https://www.wholebrainliving.com/2015/12/understanding-retained-infant-reflexes.html

4. Masgutova, Svetlana. Magutov, Denis. Parents' Guide to MNRI. Orlando, Svetlana Masguvova Educational Institute for Neuro-Sensory-Motor and Reflexes Integration, LLC. 2015

5. Blomberg MD, Harald. The Rhythmic Movement Method. Middletown, Harald Blomberg MD, 2015.