

Primitive Reflexes

- Reflex: involuntary response to a stimulus; may be used to determine the maturity of the Central Nervous System
- Most emerge/ develop in utero and are present for 2-4 months after birth
- They are essential for the birthing process, infant survive outside the womb, & reaching milestones
- They integrate/ disappear during the first year of life
- Replaced by Postural (adult) reflexes by age 3½
- If still present following the 1st year of life (especially after 3 ½ years old), then they interfere with higher-level development, such as body and emotional control

Moro

Exercise: Starfish

Symptoms associated with Retained Reflex:

<i>Motion sickness</i>	Poor coordination	Poor balance
Tense muscle tone	Exaggerated startle reaction	<i>Anxiety</i>
Withdrawal/aggression toward others	Dislike of changes or surprises	Timid
Poor learning skills	Low self-esteem	<i>Emotional instability and sensitivity</i>
Hyperactivity	<i>Mood swings</i>	Problems with vision
Hypersensitivity to light and sound	Poor auditory processing skills	Allergies
Low energy	Low immunity	Frequent ear/nose/throat infections

Asymmetrical Tonic Neck Reflex (ATNR)

Exercise: Lizards, Cross Crawls

Symptoms associated with Retained Reflex:

Inability to use cross-pattern movements (skipping)	Problems with eyes crossing middle of body, resulting in difficulty reading	Learning problems with spelling, math, and language
Balance affected by head movement	ADD and ADHD	Problems crossing midline
Difficulty learning to ride a bike	Poor sense of direction	Letter and number reversals
Poor handwriting	No established hand dominance	Problems with throwing or catching
Dyslexia	Scoliosis	Poor eye-hand coordination
Poor visual tracking	Social and behavioral challenges	Sensory input confusion

Palmar

Exercises: Thumb to Fingertip

Symptoms associated with Retained Reflex:

Poor manual dexterity	Mouth movements with handwriting	Speech articulation difficulties
Lack of independent finger mvmts	Tight grip on pencil	Hypersensitive palm of hand

Spinal Galant

Exercises: (Slow) Snow Angels

Symptoms associated with Retained Reflex:

Poor concentration	Poor short-term memory	Fidgeting
Dislike of tight clothing or tags	Poor bladder control/bedwetting	Irritable bowel syndrome

Tonic Labyrinthine Reflex (TLR)

Exercises: Superball Rocks, Superman

Symptoms of a Retained Forward TLR:

Motion sickness	Poor coordination	Problems with visual processing
Low muscle tone	Fear of heights	Poor balance
Poor posture	Avoids sports	Tires easily when standing
Poor sense of time	Poor sense of rhythm	Poor sequencing skills

Symptoms of a Retained Backward TLR:

Motion sickness	Poor coordination	Poor balance
High muscle tone	Poor posture	Toe walking
Poor sequencing skills	Poor organization skills	Poor sense of rhythm

Symmetrical Tonic Neck Reflex (STNR)

Exercise: Quad Rocking, Cat/Cows

Symptoms associated with Retained Reflex:

Poor eye-hand coordination	Difficulty focusing from near to far	Difficulty learning to swim above water
ADD and ADHD	Poor posture at desk	Tendency to anchor feet behind chair
Ape-like walk	"W" sitting	Difficulty holding head upright
Difficulty recognizing social cues	Challenges with memorization	Poor balance
Poor space and time awareness	Difficulty aligning number for math	Poor learning ability

Fear Paralysis Reflex (FPR)

Symptoms associated with Retained FPR:

Low tolerance to stress	Anxiety seeming unrelated to reality	Hypersensitivity to touch or sounds
Dislike of change or surprise	Poor adaptability	Fatigue
Breath holding	Fear of social embarrassment	Insecure/lack of trust in oneself
Overly clingy	Compulsive traits / OCD	Negativism, defeatist attitude
Won't try new activities	Temper tantrums	Motor paralysis under stress
Difficulty accepting affection	Over-reacts to changes in visual field	Struggles to think and move at the same time