

Fred Learns to Crawl

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When I opened the door I saw an adorable rosy-cheeked bright-eyed and smiling 14-month-old in the arms of his attractive young mother. She had heard me speak at a local child development organization and came to see if I might help her little boy with crawling. As often happens, the pediatrician had said, “He’s really fine, let’s just wait and see.” In fact, Fred was the picture of good health and there was nothing traumatic in his history to cause concern but the Mom didn’t think it was fine for her 14-month-old son not to be crawling, or even attempting to crawl.



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The Mom put Fred (not his real name) down on the floor while she took off her coat. He immediately went into a full Landau, smiling happily and bouncing a bit on his tummy with arms and legs lifted like a 5-6 month baby. I put a very nice toy truck on the floor about 4 feet away from him. He was clearly interested and excited by it. The bouncing accelerated a bit, as did his breathing, and he continued to smile, but there was no movement away from his spot on the floor.

Landau is one of very few reflexes that have no protective function. We call it the joy reflex. In an infant the motor pattern is symmetrical lifting of head, arms, and legs in response to visual perception of an interesting object and to the proprioceptive stimulus of being prone. Muscle tone in the abdomen is stimulated by contact with support and triggers extension of the spine and limbs. In older children and adults we see a version of this when our team wins a point (Yea, team!!) and when we jump for joy. The reflex is important developmentally for positive emotional communication, visual perception, differentiation of spinal muscles and circulation of cerebral-spinal fluid. Because of the release of endorphins it activates, the Landau can become hyperactive, even addictive.



Landau Reflex



Bauer Crawling

Fred certainly had a hyperactive Landau. That explained his stamina in the position as well as his lack of frustration and his smiling good cheer, even when the desired toy was out of his reach.

I decided to begin right away with work on Bauer Crawling. Up on the table on his tummy, Fred was still smiling, but wanted nothing to do with the asymmetrical Bauer position. If I moved one leg into flexion, the other one came too, no matter which side.



Leg Cross Flexion-Extension

It was impossible to hold him in position long enough to give the stimulus and move him through the pattern. "OK then," I thought, "what about Leg Cross Flexion-Extension?"

The motor pattern for Leg Cross Flexion-Extension is in opposition to that of Landau. It is a key reflex for differentiation and coordination of the legs. Fred stopped smiling when we put him on his back and began to move one leg at a time. The mom and I worked together, one holding a leg down in extension while the other brought the opposite leg into full flexion. Fred's resistance was strong but not enough to stop us. It seemed extremely uncomfortable for him to have one leg bent and the other straight. Nevertheless, we continued. Then suddenly the resistance stopped. The Mom and I looked at each other. "His brain just recognized the pattern," I said. We then worked very thoroughly through all the steps of MNRI® Leg Cross Flexion-Extension Reflex repatterning. Fred was calm and compliant.

Soon it was time for them to go. Mom put Fred down on the floor again to organize her things and again he went right back to a smiling full Landau. It occurred to me that he was stuck in extension, so I moved him into full flexion and had him push out of it into full extension as we do in Archetype Movements. After two or three repetitions, they went home with that and Leg Cross Flexion-Extension repatterning for their Home Program.

The next afternoon I found a message from Fred's Mom on my voice mail. "He's crawling!" she said. When they came for a second appointment the following week, Mom again put Fred on the floor while she took off her coat. This time he shot all around the room exploring everything with perfectly coordinated cross-lateral crawling on hands and knees. He smiled when he was happy or amused, otherwise not. I completed a short assessment and finding everything age appropriate, congratulated them and suggested they return only if they felt in need of help. I've never seen them again.

I wonder how things would have gone differently for Fred if he were never to learn to crawl. Neurophysiologically, the sensory-proprioceptive stimulus for crawling reaches the cortex, so it can definitely be considered a learning reflex. Many years ago as a special education reading teacher, when I visited classrooms I used to ask the children to stand up and do a 'cross crawl,' (a kind of marching in place in which one touches opposite hand to opposite knee). In a group of 15 or more children there would always be two or three who touched the same side arm to the same side knee, failing to cross the body midline. The teacher would confirm that these were the ones having problems learning how to read.

The cross lateral motor coordination used in crawling is involved in so many areas of development that it is no wonder it has for so long been considered one of the most important milestones of early development. Bearing weight on the hands opens palms and strengthens fingers and wrists in ways that will later support the fine motor control necessary for hand-writing. Scanning for a desired destination and avoiding obstacles builds spatial orientation, depth perception, and binocular vision. The eyes focus off in the distance, then back on the hands, just the way later they will use focus recovery to copy from a school blackboard. By activating the vestibular system, crawling helps to integrate the Head Righting and Symmetrical Tonic Neck Reflexes and enhances vestibular, auditory and visual integration. Psychologically, crawling is related to goal setting and motivation: the child crawls for a purpose. Early success in obtaining a desired out-of-reach object builds confidence in the notion that effort brings a good reward!

Most MNRI® practitioners have similar stories. Of course, we love them because they make our work seem magical. Lightning-like progress is far from magic though; it's simply what happens when precisely the right nudge is given to a system that is fully ready. With severe challenges we also get excellent results, albeit with lots more work. Fred had gotten stuck in his motor development somewhere along the way. We don't need to know exactly when or why. He was otherwise very, even extremely, healthy and when the stimulus for Leg Cross Flexion-Extension connected with and awakened the motor pattern already present in his brain, further development happened naturally. Suppose you trip and accidentally unplug a lamp. When there is no damage to the lamp, after you plug it back in again, how long does it take for the light to go on?



Although I only saw Fred and his Mom twice, I am grateful to them for this delightful experience and for how useful it has been to me as a teaching story. – Mary Rentschler