

# Infancy Stroke Patient Grows with IM



## Improvements in Vocabulary, Behavior, & Social Skills

**Finn** is a five year old who suffered stroke during infancy. He came to our clinic on May 16, 2006 (3 years old). All developmental milestones were delayed. Finn crawled at approximately 18-19 months of age, walked at 2 years and was nonverbal. He demonstrated severe difficulty communicating basic wants and needs. At the time of his evaluation, Finn's father reported that he had heard Finn babble on numerous occasions and his expressive vocabulary consisted of "hi". His father reported that crying was Finn's only way to communicate. He was unable to gesture or point. His parents pureed his food and he was unable to self feed. Finn also had visual deficits. Specialists were unable to determine the extent of these. He engaged primarily in solitary play. The Preschool Language Scale – 3 was administered with the following results:

Measure	Standard Score	Percentile	Age Equivalent
Auditory Comprehension	50	1	9 months
Expressive Communication	50	1	9 months
Total Language	50	1	9 months

At the time we began using IM, Finn's expressive vocabulary consisted of: 27 single words, 4 two word phrases and 2 three word phrases. Due to scheduling issues, Finn received IM one time each week. Due to Finn's inability to complete the exercises himself, all exercises were completed with hand over hand assistance. Initially, keeping the headphones on Finn was a task in and of itself, however, over time, he began to tolerate them and we continued to increase exercise length. A Long Form Assessment was not completed due to the fact that all exercises were completed hand over hand. IM exercises were modified to increase Finn's participation. Finn sat on his father's lap during all exercises as he was extremely resistant to try new things. The clinician then completed the following exercises with Finn: both toes, left and right toes, and left and right hands. We were unable to perform exercises using both hands due to the fact that Finn required a fidget item in one hand in order to participate.

Initially, Finn achieved scores ranging from 70-100ms with hand over hand assist due to his reluctance to participate. IM took place only during the first 10-15 minutes of Finn's session in the beginning. Finn received a total of 19 therapy sessions using IM. By the end of the 19th session, his scores were in the 20's and he was tolerating 30 minutes of IM.

After approximately four sessions we began to see an increase in his overall attention. Expressive vocabulary really started to develop after eight sessions when IM tasks began to increase in length. He also began to take an interest in structured activities.

Currently, Finn is demonstrating an expressive vocabulary of: 51 single words, 17 – two word phrases, 9 – three word phrases and 7 - four word sentences. His expressive vocabulary is increasing everyday as he beginning to imitate numerous words and phrases. He is attending to basic concept activities much better and is currently completing color matching activities independently. He participates in phonemic awareness, number and attributes activities with assist in the therapy setting. IM was discontinued after 19 sessions due to scheduling issues.

Initially, Finn's father reported that the school staff was concerned because Finn would cry for most of the day making it difficult to complete any kind of school work. Today, Finn has begun to interact more with the other children at school. His willingness to participate in school activities has also improved. Crying episodes are now a rare occasion. Finn is currently engaging in play activities with his siblings. Cooperative play continues to be difficult for Finn at times, especially if a novel activity is introduced, although this type of play is frequently witnessed with a familiar activity. Finn's family is extremely happy with the progress he has made with Interactive Metronome. His father feels that it is because of IM that Finn has grown so much in the last few months. His father's face lights up every time he reports a new addition to Finn's vocabulary.

*Nichole Reardon MS, CCC-SLP  
Columbus Community Hospital Wiggles and Giggles  
Columbus, NE*

[www.interactivemetronome.com](http://www.interactivemetronome.com) • 877-994-6776

