Cerebral Palsy Studies

Beginning around 2008 Duke University pediatric neurology researchers began treating cerebral palsy in children using cord blood. One such story is reflected in this videotaped account: http://pediatrics.duke.edu/modules/dept_peds_annc/index.php?id=79

Medical College of Georgia researchers has done work on animal models of cerebral palsy (rats) using cord blood stem cells, and is now preparing to carry out a clinical study involving forty (40) children with cerebral palsy: http://www.kold.com/Global/story.asp?S=11973517.

Now here is something you should know: At least five (5) years *before* either Duke or the Medical College of Georgia embarked on their work, children and infants with ***cerebral palsy*** were being treated with pure cord blood stem cells. During 2004-5 physicians conducted a pilot study involving eight (8) children with cerebral palsy who received injections of cord blood **stem cells**; a study spearheaded by Dr. David Steenblock and his team of advisers and support staff.

This study was published in the free access journal *Medical Hypotheses & Research* during 2005. As part of this study improvements were gauged by the children's parents who kept diaries and used medical and physical therapy check-ups to categorize and quantify change. The outcome:

Statistically Significant Improvements

Even though two children did not improve in mobility or cognitive behaviors, twelve of the parent ratings for all eight children were statistically significant (p=0.05). These improvement ratings included:

1. Understanding (.017) (most significant)
2. Muscle tone (.022)
3. Balance while sitting (.026)
4. Roll to side (.028)
5. Balance while standing (.029)
6. Hip movement (.029)
7. Leg Movement (.033)
8. Standing (.033)
9. Transfer from sitting position (.035)
10. Vocabulary (.037)
11. Thinking (.044)
12. Balance while walking (.049)

Not quite statistically significant was improvement in speech (.074).

Comments from the parents about their stem cell treated CP children include:

1. More energetic, looks better, interacts better, laughs at Barney on TV. Pediatrician commented that she is walking straighter, with greater balance.
2. Appears more aware, more attentive, better eye contract, less rigid movement, more balanced sitting, uses arms with more purpose, lower back arch less pronounced, back is less tense, movements more deliberate, responding faster to commands.
3. Using his sign language more consistently, putting together 2 signs to communicate of his own volition and being more creative with his limited language to tell us what he wants. His tantrums have decreased.

4. Slight improvement in putting arms straight up, more smooth movement, starting to talk more, understanding improving, less effort in helping him stand and walk, hearing improved, more sensitive to loud noises.
5. Increase in attention and awareness. Has shown improvements across the board including visual tracking and interactions with others. More alert, more strength in holding up head, smiles, listens to conversations, increased vocalizations such as laughing and crying and cooing, eye tracking, more interactions with people and a greater sense of happiness. Flexibility has improved, stronger with stepping, standing and crawling (with assistance).
6. Excellent mood, feels good. Stronger spine, muscular control, balance, increased range of motion in right arm, more able to use right hand. Able to isolate fingers on left hand and shoot a small ball through a hoop. More centered and stable.

Study Limitations: While the subject population was small, there was no age, sex and comparable disability control group, the study was not blinded, the rating scale used was not standardized and the results were based on parental perceptions which can be skewed either positively or negatively, it was a suitable "first step."

Since that study approximately two hundred (200) other children with cerebral palsy, traumatic brain injury (TBI) and other neurologic challenges treated by Dr. Ramirez *et al* were tracked from 2004-2010. Here are some some of the noteworthy things that came to light:

- Approximately 85% of infants and children with cerebral palsy and TBI showed clinically significant improvements following their treatment with an IV drip infusion of between 1.5 and 10 million pure CD34+/AC133 cord blood stem cells.
- Five (5) children with "cortical blindness" due to optic nerve hypoplasia (ONH) experienced a resolution of their condition to the point they could track objects and be fitted with prescription eyeglasses. One of the most well known of these children is Adam Susser, whose attorney father set up a nonprofit foundation in his name: http://adamsusserfoundation.org/AdamsStory.html
- Five (5) children who had a history of seizures experienced a significant reduction in (and in some cases a complete resolution) following IV treatment with pure cord blood-derived **stem cells**.

In addition, many impressive case reports surfaced. Here are three (3):

(1) In 2005 a seven year old female child, Alyssa Bavaro of NYC, was treated in Mexico with pure cord blood stem cells (1.5 million CD34+/AC133 & neurogenic progenitors) by IV drip. This little girl was struggling with sever spasticity and a failure to thrive, i.e., anorexia due to no appetite and resulting refusal to eat, linked to her cerebral palsy. Following her treatment Alyssa's appetite became ravenous and she quickly gained weight and inches in height. In addition, her longstanding spasticity was reduced and she experienced numerous gains in bodily functioning that were documented and attested to by New York state licensed physical therapist, Jill Conlon. Her story attracted the attention of ABC's flagship station in NYC and was the subject of a TV news segment hosted by Kimberley Richardson (May 2005).

(2) A little boy named Kirk W. had stem cell therapy at the end of May 2005 for cerebral palsy-related physical challenge including seizures. In the months following his treatment his parents report that he "hasn't had any more of those little seizure-things since I last wrote you". They also shared that: "His appetite has increased and he sleeps much longer at night. His sleeping positions have changed a lot. He sleeps more relaxed and moves in his sleep rather than waking up at night crying for me to move him from side-to-side. Last night for the second time in his 3 years of life he slept on his stomach. He is often in a fetal position while sleeping where before he would be stiff""As for motor function during the waking hours, Kirk's arms have slight increases in mobility; his kicking is faster; he is rolling a little more, and a little more curious about what is going on; his memory is much improved."

(3) Cerebral palsy sufferer Emily P. was, as her mother Karen put it, so brain damaged she “had no personality” and could say only a few badly garbled words. Emily went on to receive 200 hours + of HBO and just about every conceivable kind of treatment available, with only minor gains in function. Following an IV drip treatment with pure cord blood stem cells in Mexico Emily demonstrated very significant gains in her ability to focus, concentrate, and to articulate words (Her vocabulary expanded and she began using complex sentences). She began holding a crayon and making a line, could count to 24, make jokes, feeds herself better than ever before, and developed greater interaction with her siblings (who now describe her as being “so cute”). Emily’s parents were so impressed with the gains after stem cell therapy, that they brought her back for a second treatment which led to physical gains so great that Emily was able to get about using a walker.

In addition, certain response trends emerged:

The younger the patient is when treated, the better the physical and mental responses tend to be. The youngest child with brain damaged to be treated with pure cord blood stem cells during the period 2003-7 was two months of age and experienced *profound* neurologic gains. This makes sense, because cord blood stem cells have been shown to actually become neurons and such in infants up to two months are so of age.When physical or mental gains in function occur in non-progressive medical diseases and conditions, they seldom regress or disappear.Children who respond to a first treatment with pure cord blood stem cells tend to do so when retreated. The effect, however, tends to be less with each subsequent treatment and eventually plateaus and “peters out”.Children who received the greatest quantity of cord blood stem cells did better on-a-whole than those who received the lower doses. For instance, children that received ten (10) million cord blood-derived stem cells often showed more vigorous positive responses than those who received only 1.5 million or so.The gains afforded by cord blood stem cell therapy can often be amplified by pharmaceutical and non-pharmaceutical (dietary, nutraceutical) means. In the past this has included hyperbaric oxygen therapy (HBOT), use of nootropics (intellectual functioning enhancing drugs and natural compounds), transcranial magnetic stimulation, and various forms of physical, animal, art, music and play therapies.

Please contact us at 949-229-8551 or use this for more information about Dr Steenblock and his approach to chronic and degenerative disease treatment: