

Spring 2009

---

# Shenzhen Beike Biotechnology Co. Ltd.



Beike Biotech  
Stem Cell Treatment  
Press Articles Booklet  
2006 - 2009

**9<sup>th</sup> Floor, Zhongke Building, No.1 Hi-Tech South Street  
South Area, Shenzhen Hi-Tech Industrial Park  
Shenzhen, Guangdong, China 518057**  
www.beikebiotech.com Tel: +86 0532-6677-6679 Fax: +86 0532-8577-9113

**Table of Contents**

<b>Ataxia .....</b>	<b>4</b>	<b>Motor Neuron Disease (MND) .....</b>	<b>35</b>
<b>Supreme Effort to Gain Ordinary Life .....</b>	<b>4</b>	<b>Ballinderry Man Returns Home From China.....</b>	<b>35</b>
<b>Voyage of Recovery.....</b>	<b>8</b>	<b>Multiple Sclerosis.....</b>	<b>37</b>
<b>Autism .....</b>	<b>12</b>	<b>Stem Cell Treatment Working, Says Patient .....</b>	<b>37</b>
<b>Clarksville Mom Again Taking Her 11-year-old Son to China for Stem-Cell Treatment.....</b>	<b>12</b>	<b>Optic Nerve Hypoplasia .....</b>	<b>39</b>
<b>Batten’s Disease .....</b>	<b>14</b>	<b>Two-year-old Girl Can See for the First Time Following Stem Cell Treatment .....</b>	<b>39</b>
<b>Pioneering Stem Cell Treatment Gives Family a Glimmer of Hope.....</b>	<b>14</b>	<b>Life of Blindness Now Getting Clear .....</b>	<b>41</b>
<b>Traumatic Brain Injury (TBI).....</b>	<b>16</b>	<b>‘No Regrets’ for Boy's Experimental Stem-Cell Treatment In China .....</b>	<b>44</b>
<b>Stem-Cell Treatments Raise Hopes.....</b>	<b>16</b>	<b>Rulo Family Returns from China Stem Cell Trip ....</b>	<b>46</b>
<b>Utah Families Encouraged by Stem Cell Treatments .....</b>	<b>18</b>	<b>Brandon's Fight for Sight.....</b>	<b>47</b>
<b>Father And Son Return After Trip to China for Stem Cell Transplant .....</b>	<b>21</b>	<b>Schizencephaly .....</b>	<b>49</b>
<b>Friedreich’s Ataxia (FA) .....</b>	<b>23</b>	<b>Stem Cell Miracle .....</b>	<b>49</b>
<b>Boxer Heads to China for Stem Cell Treatment....</b>	<b>23</b>	<b>Spinal Muscular Atrophy (SMA).....</b>	<b>51</b>
<b>Glucose Transporter Deficiency (GLUT-1) .....</b>	<b>26</b>	<b>Stem Cell Treatments Help Janesville Boy.....</b>	<b>51</b>
<b>Stem Cell Injections Helping East Troy Girl Cope With Gene Disorder .....</b>	<b>26</b>	<b>Septo-Optic Dysplasia.....</b>	<b>55</b>
<b>Ischemic Optic Neuropathy .....</b>	<b>29</b>	<b>Blind Girl Can See for the First Time.....</b>	<b>55</b>
<b>Carl Stevens: Home From China .....</b>	<b>29</b>	<b>Stem Cell Treatment in China Helps Restore Girl's Sight.....</b>	<b>57</b>
<b>Machado-Joseph Disease (MJD).....</b>	<b>30</b>	<b>Therapy In China Gives Blind Arkansas Girl Some Sight.....</b>	<b>60</b>
<b>Stem Cell Treatment a Miracle For Keslick.....</b>	<b>30</b>	<b>Spinal Cord Injuries (SCI).....</b>	<b>62</b>
<b>Through the kindness of strangers, my kids got their father back .....</b>	<b>33</b>	<b>Disabled Teen Still Showing Progress After Stem Cell Treatment .....</b>	<b>62</b>
		<b>Ricky Turner Gets Adult Stem Cells in China, Sees Marked Improvement in Paralysis .....</b>	<b>64</b>
		<b>Cole Returns From China .....</b>	<b>66</b>
		<b>Stem-Cell Treatment May Help Man Walk Again .</b>	<b>68</b>
		<b>General News .....</b>	<b>72</b>
		<b>Doctor Plans Trip Overseas To See Stem Cell Treatments .....</b>	<b>72</b>



## Ataxia

# Journal Live

## Supreme Effort to Gain Ordinary

### Life

By Jane Hall

December 26, 2007

Earlier this year, The Journal told the moving story of Scott Nugent, who suffers from the same rare degenerative brain disease that killed both his mother and his baby son. He was pinning his hopes on expensive and controversial stem cell treatment to give him extra time with his family. Journal readers raised much of the cash that enabled Scott to fly to China for the care in the summer. Jane Hall finds out what's happened since – and what the future holds for Scott.

TWELVE months ago 2007 was shaping up to be one of the worst of Scott Nugent's life.

As others prepared for Christmas and looked forward to a new beginning as the nation rang out the old year and welcomed in the new, 2007 opened up before Scott like a yawning chasm. And he was standing right on the edge ready to tumble in.

His mother was dying of a degenerative brain disease – the same inherited condition that cruelly took the life of his eight-month-old son Oliver and will one day claim Scott.

He should have been looking forward to the festivities with his wife Louise and young son George. But unable to walk unaided and with his sight, co-ordination and speech deteriorating, at 34 he found himself having to face up to his own mortality as his nerve endings stopped functioning and his body slowly shut down.

Worried about what the future held for his family and desperate to be there for George as he grew up, Scott confronted the New Year not with hope, but with a deep-seated fear.

The only gift he wanted for Christmas was to stave off the inevitable to spend a few more precious years with his family.



*Scott Nugent with his wife Louise and son George*

Twelve months on and things couldn't be more different. Scott's body is still being ravaged by the rare neurological condition spinocerebellar ataxia, but thanks to controversial stem cell treatment he put himself through in China in the summer, he believes he has now been granted his wish to see George grow up.

And with 2008 only days away, the now 35-year-old is in high spirits. “I never thought 12 months ago I would be in this position. It all started in about March when I became aware of the stem cell treatment. At the beginning of last year I had no hope and no idea that any of this was going to happen. Now I feel much more positive.” Scott flew to China last July after family, friends and Journal readers raised £36,000 to help pay for the stem cell procedure, which is banned in the UK, America and Europe.

But the technique, which involves injecting stem cells from the umbilical cords of healthy full-term babies into the bloodstream and base of the skull, has had some success in China in easing symptoms for ataxia victims.

Scott saw an immediate improvement in both his walking and handwriting, and was able to send Louise a four-page letter on their 10th wedding anniversary. “I was doing laps of the hospital and walking everywhere,” Scott says. Unfortunately, once he was home in Whitley Bay, North Tyneside, the effects wore off and Scott is once again unable to write or walk unaided.

However, his speech, eyesight, co-ordination and energy have improved significantly. And while there is no way of measuring if extra years have been added to his already diminished life expectancy, Scott believes he will be seeing in many more new years.

Sitting in his red-painted living room, a decorated Christmas tree standing in the window and Louise at his side, Scott says: “There is an improvement in me, but sadly not across the board. It’s not as great as I had hoped for. But I do feel I have given myself extra years.

“Obviously, there is no way of saying what my life expectancy was before I had the treatment, but I believe that by doing this I have given myself longer.

“That’s all I wanted, to be able to see George grow up. People who have never had to live with something like this don’t understand how desperate you become. I was desperate, really desperate – I still am. I am scared to leave George early; he is our reason for living.

“There is no cure for my condition and the stem cell treatment was the only hope I had. A lot of experts, doctors and friends didn’t think the treatment would work at all, and it has had some effect. I used to have to use a magnifying glass to read and now I don’t need to, and my co-ordination is definitely better. I’m much steadier holding a drink, and a friend who came around the other day to help us put up some flat-pack furniture said he could tell I was steadier and more energised.

“I don’t see the fact that the treatment hasn’t worked across the board as a failure. Unfortunately, I think my particular strain of the disease – type 7 – is a particularly virulent one. Perhaps if I had known about this treatment a couple of years ago, the results might have been better.

“But deep down I believe I have given myself extra time. I was willing to try anything, to go all the way to China on a whim and a hope, and I do believe it has paid off. I just want to be here for as long as I can be for Louise and George.”

Having watched one son die, Scott’s desperation is easy to understand. Oliver was one of only a handful of children worldwide born with full-blown ataxia. Scott began to display the symptoms of the disease that has ravaged his family when he was 24. But the Nugents, who

married in August 1997, decided to try for a baby after being reassured by medical experts that while there was a 50/50 chance of the condition being passed on, a cure would probably be available by the time ataxia took hold of any child.

Oliver was born in January 2003, but at six months was diagnosed with infantile spinocerebellar ataxia. He died on September 22 that year. As the couple struggled to come to terms with Oliver's death, Scott's own condition worsened.

Deep down Scott, a former software engineer who learned his craft at Vickers in Scotswood, Newcastle, says he always knew there was something wrong with him.

His maternal grandmother Lena Wright and uncle Alan Wright all developed spinocerebellar ataxia. His own mother June eventually succumbed last May, aged 58.

There is evidence that generations of Scott's family have suffered from it. But because scientists pinpointed the faulty gene only in 1996, the condition had been misdiagnosed as either motor neurone disease or Parkinson's.

Scott describes spinocerebellar ataxia as a genetic spelling mistake that gets bigger and bigger as it passes down the generations. "Years back, the spelling mistake was a lot smaller, so people weren't getting shaky until they were in their 80s." What is undisputed is that the condition is now manifesting itself earlier.

Three-year-old George is thankfully free from the rogue gene that killed his brother and that will one day claim the life of his father. That's because he was conceived with donor sperm.

Despite Scott's deteriorating health, Louise, 37, says they never considered not having another child. "When Oliver died we knew the only thing that would help would be to have another child. Not to replace Oliver, but we just loved being parents. And Scott wasn't as bad then. He was still walking around."

To George there is nothing different about his dad. "He copes very well," Louise says. "He knows there is something wrong with his dad, but he helps him as much as he can. He is a really caring and kind boy."

Has she seen an improvement in her husband? "It's hard for me because I've never had a problem with his speech as I'm with him all the time, but I do think he is talking better. I have to take his word for it that his eyesight has improved."

Scott interjects: "But the main aim was always to get me longer to live, and I believe that has happened. But life expectancy is a funny thing as I could go out and get run over by a bus. You never know what is around the corner."

Just as Scott's year has turned out better than expected, so has Louise's.

The primary school teacher who gave up work to tend her husband has utilised her care experience to launch her own business, At Your Side, specialising in looking after elderly people and those with neurological disorders. She is looking forward to the many challenges she knows will come her way in 2008.

In the meantime, the Nugents are preparing for Christmas – and aim to make it the best one yet for George. "Neither of us are very Christmassy people, but with having George and after what we have been through this year we are going to

make it extra special with lots of presents and time spent with the family,” Louise says.

“In the New Year I am going to concentrate on the business, getting on with our lives and trying not to think of the future too much.

“This really has been one heck of a year, but a lot of positivity has come out of it,” she adds, taking hold of Scott’s hand.

“The fundraising has brought all our family and friends together and we have realised that there are people who care. That has really surprised and touched us.”





## Voyage of Recovery

Danville woman among those pioneering new treatment in China for a cure to her inherited disease

By Geoff Gillette

January 2, 2009

Oct. 28: Priscilla and I are all moved into our room on the 20th floor of the hospital in Hangzhou. I have had tests, been interviewed several doctors. They will tell me after some evaluations if I am healthy enough for the bone marrow

Those were the first words Joanne Loveland posted on her blog when she and her good friend Priscilla checked into the Xiaoshan Hospital in Hangzhou, China, on a journey to find a cure to a hereditary disease that has affected many members of her family.

"We have a genetic condition in our family called ataxia. It is not well known, but it is similar to MS and Parkinson's disease," she said.

Ataxia affects the central nervous system, causing its victims to experience atrophy in their cerebellum. It affects balance, speech, coordination and is progressive and incurable. As it works its way through the victim's systems, they also begin to experience weakness and loss of energy.

Loveland said the family first became aware of the illness when her grandmother began to

experience symptoms. "She was diagnosed with late onset MS." It wasn't until later that doctors realized the misdiagnosis and pegged ataxia as the culprit.

"We didn't know as she was dealing with it that it was an inherited thing," said Loveland. "She started seeing symptoms in her 60s, my father started to see it in his late 50s."

Ataxia has affected Loveland's grandmother, father, aunt, brother and herself. The 59-year-old Danville woman said it has come upon her gradually, but she is seeing the effects of the disease now as well.

"I do notice when I'm walking I have balance issues. I am wobbly. Balance is the major thing, along with some speech and minor coordination," she explained.

The erosion of her skills affected many aspects of her life. The mother of two grown children, Loveland had been working at the Diablo Lodge until July when the situation became untenable. She has been unemployed since then.

Because the disease is said to be incurable, Loveland and her family did what they could to hold off the symptoms through physical therapy and exercise. Still their hopes rose when a cousin informed her that he'd seen an ABC Nightline program about a hospital in China working on a host of illnesses using stem cells.

The program dealt with a company called Beike Biotech. Beike has rented hospital facilities all across China and set up care facilities where patients suffering from a variety of illnesses can come for stem cell treatments.

Stem cells are cells that have not been assigned to a specific task in the body. They are found in most if not all multi-cellular organisms.

Humans have two types of stem cells:

\* embryonic, which come from either the umbilical cords of newborn babies or from amniotic fluid; and

\* adult stem cells, which work with another type of cell called a progenitor cell to act as a repair system in a grown human.

When injected into the body, the cells have been seen to act as a repair and strengthening agent. They go to an area of weakness in the body and differentiate to become the type of cell necessary to assist the weakened area. They can become almost any type of specialized cell.

In the United States, stem cell research is currently against federal regulations, so in order to get treatments involving stem cells, it is necessary to go out of the country.

Loveland said when they heard about the work being done by Beike Biotech they began researching what they could about stem cells and ataxia. They found that Beike was working with ataxia patients, as well as many other diseases.

"People from all over the world are going there for these treatments. People with MS, Parkinson's, they are trying out these stem cell treatments, and a lot of them are seeing results," she said.

After more research, Loveland's brother went to China for the treatment. "You go over three-and-a-half weeks, and you get five transfusions, one as an IV and the other four are given in the spinal cord."

Loveland said she was heartened by the reports she was getting back from her brother regarding

his condition. "He couldn't believe how much better he felt after each treatment. He had no complications, his body didn't react negatively to the stem cells."

With that positive response, Loveland made the decision that she, too, would make the journey to Hangzhou and undergo the procedure.

"It's definitely a leap of faith, an adventure," she said. With a cost of over \$24,000 for the entire procedure, it's also a major financial commitment, something Loveland said she thought hard about but ultimately did not let stand in her way. "This is a treatment that helped my brother to get back a lot of function. He still has good days and bad days, but he can see the difference. I think it's worth it to try."

One of the reasons that stem cell research is currently not allowed in the U.S. is the implications of using cells from newborns or amniotic fluid. It has become a focus of much debate. When asked if she was worried about people's reactions to her seeking such a treatment abroad she said she's not encountered any negative reaction. "A lot of people know I'm going and most are like, 'Wow, that's great.' Most want to follow what's going on while I'm there. You feel more like you're being sort of a pioneer."

She added that Beike's treatments don't utilize the amniotic stem cells, which although more potent do present some risks in obtaining them. "They use the umbilical cells. The umbilical cord is really just a piece of tissue that is being thrown away when the baby is born. They're taking umbilical cords, harvesting the stem cells and putting them in a medium where they can be transfused into patients."

In late October, Loveland and her best friend Priscilla boarded a jet and embarked on the trip

to Hangzhou. There were no problems getting to the hospital and getting checked in. She said she was both nervous and excited to get the procedure under way. "They warn you that after the lumbar (spinal) punctures you could have really bad headaches. I just wasn't sure what was going to happen."

Oct. 31: Wednesday I had my first stem cell treatment which was a piece of cake because it was by IV. They do an IV treatment first to make sure you do not have an allergic reaction to the stem cells. In 30 minutes I am going to have my first lumbar stem cell treatment. Wish me a great spinal experience with no headache after.

Over the course of the nearly four weeks she was there, Loveland underwent the stem cell transfusions, but also had a daily physical regimen she was required to follow. The course of treatment prescribed by Beike followed both scientific and wholistic approaches. Bone marrow was transfused to harvest Loveland's own adult stem cells, which were then injected into the spinal column to shore up damaged nerve tissues.

Physical therapy was held each day as well as acupuncture, all working toward the single goal of strengthening Loveland's damaged central nervous system and giving back some of the function she had lost.

Nov. 2: My first lumbar stem cell transfusion on Friday afternoon went well with no bad headache. Tomorrow I am going to have my bone marrow transfusion. They will extract some of my bone marrow from my hip. They harvest the marrow for five days and then they give me another stem cell treatment with my own stem cells. Many of the patients here have received this treatment. It is very new, but

everyone is hopeful it will increase the success of the treatments.

Everyone here is positive and grateful to be here. Patients have MS, ALS, spinal injuries and brain injuries as well as Ataxia. There are 13 rooms for patients on this floor and every room is occupied.

In her blog Loveland talked about the gradual realization that she was seeing improvement. "I noticed at dinner that I was not stiff when I got up to leave. My balance when walking felt very good walking back to the hospital. I believe all these treatments together are helping."

Nov. 8: Today I had my regularly scheduled acupuncture and physical therapy. I wasn't as good with my balance today. I know there will be good days and average days. I will receive my own stem cells from my bone marrow Wednesday this week.

We are realizing how lucky I am compared to many of the patients here.

Loveland's final blog entry before returning home showed a renewed feeling of accomplishment and hope for a future with greater mobility, speech and coordination.

Nov. 12: Wednesday I had my bone marrow stem cells returned to me in my spinal column. It went very smoothly and today I am feeling stronger than ever and I feel my speech is better as well. I can't say enough about how wonderful the nurses and doctors have been on the 20th floor. The staff are all young, but very professional and helpful.

Now back in the U.S., Loveland has begun resuming her life in the wake of her journey. Already she has noticed a definite improvement. "My energy level is higher. My balance is better.

Before, if I carried a glass of water across a room it would splash out because my gait was more jerky. Now I can carry a glass of ice tea to a table and not splash it. My walking is more normal."

Loveland said her doctors told her to expect to see continued improvement over the next few months as the stem cells continue to regenerate.

Even with her successes she remains cautious in her optimism. "This whole stem cell thing is not a cure but it does improve the things you are dealing with. For me, it's speech and coordination."

The big question, though, is does she feel it was worth it? The expense, the time, the procedures? Loveland says absolutely yes. "I feel like I had to do this because it helped with the research. I am a pioneer in this. People are coming from all over to do this to see even a slight gain because it improves quality of life. I am very grateful."

Successes using stem cell technology are beginning to appear all over the world. Four European doctors recently replaced a woman's windpipe with a donor organ, using stem cells from the woman's own body to line her throat to lessen the chances of rejection. Successes in spinal surgery have also been reported, using stem cells to help damaged tissue and nerves to heal.

Research in the U.S. could begin again in early 2009, as President-Elect Barack Obama has said one of the first things his administration would do in office is lift the presidential ban on embryonic stem cell research. Loveland said she is excited by the president's statements and feels it will spur some great advances in the research. "I know there are biotech companies in California and the U.S. that are just waiting for

these restrictions to be lifted so they can get right into this."

Meanwhile Loveland's pioneering journey shows that there is a chance for those throughout the world suffering from degenerative nerve disorders to return a sense of normalcy to their lives. "It's given me a lot of hope for the future for eliminating the symptoms of ataxia and other illnesses. Hope is here."

## Autism

NEWSANDTRIBUNE.COM

[Clarksville Mom Again Taking Her](#)

[11-year-old Son to China for](#)

[Stem-Cell Treatment](#)

By MATTHEW RALPH

June 12, 2007

CLARKSVILLE — Surrounded by strangers wearing white nurse's uniforms and masks covering everything but their eyes, a jet-lagged and emotionally drained Rita Badger did the only thing she could think to do when presented with a medical-release form written entirely in Chinese.

"I prayed and asked God if it was the right thing to do," said Badger, a Clarksville woman who traveled to China with her 11-year-old son Mason for his stem-cell treatments last September.

Signing the medical-release form, Badger gave a medical staff she had to use a translator to speak with permission to inject some 60 million stem cells taken from the umbilical cords of healthy newborn babies into her son's spine.

Eight months after the four-week hospital stay — where in addition to the injections, Mason underwent extensive physical therapy — Badger is convinced that the unproven technique more and more Americans are leaving the country seeking has made a difference.

The second of Badger's three boys, Mason suffers from cerebral palsy and autism. His vision is impaired and ordinary activities most healthy people take for granted are a challenge — he eats through a feeding tube and isn't able to walk on his own. He suffers from routine seizures.

"I see my son coming out," Badger said, sitting in her living room as Mason climbed onto her lap and wrapped his arms tightly around her neck. "For him to put together the sentence 'I want to go to McDonald's' is big for him. Before all he could make out was 'Donald's.'"



Despite the high price tag — travel, a month stay at the hospital and the treatments costs \$22,000 — Badger has planned a second trip to Nanshan Hospital.

The treatment is unavailable in the U.S.

"I'd rather have it done here at the University of Louisville and not have to leave my family for a month," she said.

The trip and its associated costs — the Badgers are relying on the generosity of others to help pay the bills — aren't the only obstacles to overcome.

Doctors in the U.S. have widely criticized the procedure and the mere mention of stem cells is sure to draw raised eyebrows given the heated political and religious debate about the use of embryonic stem cells.

“I think it's important for people to know that these stem cells come from umbilical cords of healthy babies,” Badger said. “They come from something that's just thrown away.”

The Badgers aren't alone. More than 170 patients from 29 countries have been treated at Nanshan Hospital, according to published reports.

Good, bad or indifferent, the Badgers likely won't be worrying too much about their detractors.

When Mason was an infant, Badger said doctors told the family they should consider putting him in an institution.

“We were told he would never be able to do anything,” she said. “But I won't take no for an answer.”

## Batten's Disease

### The Argus

#### Pioneering Stem Cell Treatment Gives Family a Glimmer of Hope

By Lynn Eccles

September 19, 2006

Sacha Skinner will be six years old this week.

There will be toys and birthday cake but most importantly this year, there will be hope for the girl from Brighton.



*Annette Dacosta took daughter Sacha Skinner to China for treatment*

Sacha has Batten Disease, a degenerative brain disorder which has left her unable to communicate and made it difficult for her to move around.

Her mother Annette Dacosta recalled the hell she went through when her little girl was diagnosed just over a year ago.

She said: "All I could think about was that my little girl was going to die. I was going to lose her. That's what Batten's is, it is a death sentence.

"I cried and cried but after a month of despair I started to get mobilised. Her dad and I started to read up on it and find ways to help her, to try and slow the disease down."

Batten Disease is very rare, with only about 30 children in the UK affected by it. This means resources for research are very limited.

Mrs Dacosta said: "We had to learn everything from scratch.

Talk to parents of other Batten's children and find out what had worked for them."

The search for a lifeline has taken the family to Switzerland, Australia, America and most recently, China.

At a Shenyang hospital, Sacha had pioneering stem-cell treatment. She is only the third child with Batten's in the world to undergo the procedure.

Sacha spent a month in China where she had acupuncture, daily physiotherapy and five stem-cell injections. Stem cells were harvested from umbilical cords and injected directly into Sacha's spine.

Mrs Dacosta said: "I have been reading up on stem cells and they are like magic. They gravitate to areas where there is damage and start a repair job.

"We are really positive at the moment. We have seen small changes in Sacha. She stopped dribbling for a while in China and she is more alert and more vocal since she came home.

"She is lifting her arms and reaching for things. Before she was very weak. The school has seen the same signs, I know I am not imagining it."

Mrs Dacosta, of Firle Road, Brighton, is in touch with people across the world who have been treated with stem-cell injections.

She said: "It is still early days and I know from talking to others that the changes can take months to appear."

Mrs Dacosta knows the treatment is experimental but says she has to do something.

She said: "Sacha's health is the most important thing to me.

I wouldn't put her through anything that would hurt her.

"But if I don't do something she will die. I have to do everything I can to prevent it, to halt it, to keep her as well as possible for as long as possible. I can't just let my little girl fade away."

## Traumatic Brain Injury (TBI)

### Deseret News

#### Stem-Cell Treatments Raise Hopes

By Kaye Nelson

July 21, 2007

AMERICAN FORK — Many travelers to foreign countries have goals to see new sights and try exotic foods.

Travis Ashton's goal was a bit loftier — to receive stem-cell treatments at a hospital in China to help recover from a brain injury he suffered in a car accident seven years ago.

Travis, 18, and his parents traveled to Hangzhou, China, in June for a five-week stay at the Beike Biotechnology Clinic where Travis was to receive four stem-cell treatments. He received six.

"We had planned on four, and he ended up having two more," said Missy Ashton, Travis' mother. "The theory behind that is the more stem cells there are, the more that can develop."

Travis had all but one treatment through spinal injections. The last one was administered intravenously.

"They like to do one in your bloodstream," Missy Ashton said. She said the adult stem cells are harvested from umbilical cords and there were 10 million stem cells in each treatment.

She was counseled that much of the progress a patient sees comes within six months of having treatments.

The signs of progress might seem small to those not close to Travis' situation, but his mother said he can do things now he couldn't before.



*Travis Ashton*

"He started to have feeling in the back of his tongue," she said. "He has more control over his saliva. He drools, but that has decreased 75 percent."

She also said Travis can drink water now, something he had been unable to do since his accident. He can open and close his eyes without using his hand to manipulate the eyelids, and his hearing has also greatly improved.

"Once you build connections between nerves and the brain, you can build on that," Missy Ashton said. "Then it's about building muscles."

Travis' father, Jed Ashton, returned after one week to care for the family's other children. He is happy for the changes but isn't sure where the progress comes from.

"I can see some subtle differences," he said.

"They could be from the physical therapy or the stem cells. I'd like to think the stem cells had some positive effects — I just couldn't say for sure."

Travis' care while at the hospital included more than just stem-cell treatments.

"They did speech therapy, massage therapy, physical therapy and acupuncture," Jed Ashton said. He added that Travis was scheduled for therapy all day long, from 9 a.m. to 4 p.m. some days, and that kind of rigor can't be duplicated here because of time, family and money.

The \$50,000 price tag for the trip, a good portion gathered through local fund-raisers, paid for Travis' treatments as well as airfare and food. Asked if Travis would return for more treatments, his mother said she's not over the jet lag of this trip but would consider it.

"If it's helpful to Travis, I can't see that anything would stop us," she said. The good thing about returning to the clinic is that the cost of his treatments will never rise.

"The prices go up every quarter," Missy Ashton said. "But once you've been, you are locked in at that price."

The clinic in Hangzhou is Chinese-run, but the lab is run by Americans with many American doctors and researchers on site.

She said the hospital had to open a second floor because so many people were there for the injections.

Missy Ashton thinks stem-cell treatments will be available in the United States, not in her lifetime, but perhaps for her grandchildren.

"I think that in the next 50 years or so there will be more done — more funding, more research," she said. "But it won't be available to this generation."

She said many people assume nothing is currently being done in this country.

"There's a misconception that the U.S. isn't doing anything, but they are, and President Bush is, too," she said. "It shouldn't be a political issue. It should just be common sense with some guidelines because there are ethical issues involved."

The measures of progress Travis gained from his treatments mean a lot to him and his family.

"In the rehab world, these are huge things," his mother said.



## Utah Families Encouraged by Stem Cell Treatments

By JEREMY DUDA

August 12, 2007

At the Beike Clinic in Hangzhou, China, a modern-day Silk Road brings in people from across the globe for stem cell treatment that is unavailable in many countries, including the United States.

Some who have made the journey have seen groundbreaking results. For others, the improvements have been more subtle. But for three Utah families, it was a trip worth taking.



*Tori Schmanski (16) works with her speech therapist, Meredyth Grover, and her grandmother Lois Harris. The object of the exercise is to have Tori answer questions about what ingredients should be included in her pudding using a touch pad.*

Tim and Maria Schmanski weren't expecting a miracle at the Beike Clinic, and they didn't get one. But the improvements in their daughter Tori are clearly visible.

Two years ago, a car wreck and near drowning left the Orem teen with an anoxic brain injury. Since then she has not been able walk, talk or eat by herself.

In January, Tori's parents brought her to the Beike Clinic, where she underwent a month of treatment that included injections of more than 50 million stem cells. After half a year -- doctors say the full results take four to six months to show -- the changes are sometimes small, but they are there.

Tim said Tori, now 16, can swallow and eat more easily, and is able to eat on her own depending on the food. She is also more aware of her surroundings than before. Several weeks ago, she spotted a jet and followed it across the sky with her eyes.

"It sounds like a little thing, but when ... she sees a jet and follows it, it's a good sign," Tim said.

Tim said he saw many patients at the Beike Clinic who experienced dramatic improvements in conditions such as multiple sclerosis and ataxia. Tori's condition, however, may be too severe for that. Tim said it was one of the more severe cases that the clinic had seen.

"You've got to go with low expectations. There's no guarantees it helps them. Some others it doesn't help as much," he said. "We would've liked to have seen a miracle, but we didn't go over expecting it."

Missy and Jed Ashton weren't expecting a miracle either, but the results of their son's stem cell treatment have been significant. Their son Travis was in a car wreck seven years ago that left him with a traumatic brain injury. After a couple years he was able to stop using the wheelchair he was confined to, but he was still

unable to talk and did not have the full function of many of his muscles.

The Ashtons, of Highland, went to Hangzhou in June and returned about a month ago. Travis, who turned 18 during the trip, seems to have improved by leaps and bounds since then.

Though he still can't talk -- he communicates mostly through hand gestures -- he has been able to move his tongue and lips more. His vision has improved, as has the hearing in his right ear. His right arm, which had been drawn up in an unnatural position since the wreck, sits more relaxed. He can even drink water, which he was not able to do before because of its thin consistency.

"That may not be a big deal to a lot of people, but ... he's thrilled that he can drink water," Missy said.

The family is optimistic about the future. Travis hopes to be able to speak again someday, and, like most teenagers, wants to drive too. He exercises frequently, and will soon begin an intensive physical therapy program that is similar to the one offered at the Beike Clinic, which Missy said is hard to find in the United States.

Missy expects Travis to continue to show improvement while the treatment's full effects emerge, and Travis hopes to fully exploit the possibilities during that four- to six-month window.

"He gained some improvement, so I feel like it kind of has opened the doors," Missy said. "Since the stem cells will grow for about six months, we're going to hopefully take advantage of this time and hopefully do as much therapy as possible."

Before she was in a bus crash in Egypt two years ago, Dena Gennerman was a commercial airline pilot. But since that crash left her with brain damage, she has been much like Tori, unable to walk, talk or eat on her own.

Gennerman's parents took her to the Beike Clinic in early May and stayed for about eight weeks. Bob Brehm, her father, said the effects of the treatment are showing.

The 39-year-old woman's left side had always been "quite strong," Brehm said, but the right side was weak. Now the right side has gained strength and she can walk, albeit with the help of a physical therapist. She is more alert than before, and Brehm expects to see more improvements as time goes on.

"They're minor improvements, but they're big improvements at our end of the scale," said Brehm, a Park City resident. "I'm pleased with it, and I'm anticipating we'll see more improvement."

Brehm is already planning to take his daughter back to Hangzhou late this year or early next year. He said doctors told him that patients often see more dramatic improvements after a second round of stem cell treatment. The Ashtons are also thinking about making another trip if Travis continues to show improvements. Tim Schmanski said he is taking a wait-and-see approach to a second stint at the Beike Clinic, but he and Maria are open to the possibility.

Tim keeps in touch with Brehm and the Ashtons, and all three families communicate frequently with others across the country who are in similar situations. Each time a family takes a first trip to Hangzhou, they become a bank of information for people looking to go themselves. Just as Tim advised Brehm and the Ashtons on

what to expect, they continue to spread the word to others.

And the word has been pretty encouraging so far.

For more information about the three cases, go to [pray4tori.com](http://pray4tori.com), [travisashton.com](http://travisashton.com) and [caringbridge.org/ut/dena](http://caringbridge.org/ut/dena).



# MISSOURIAN

## Father And Son Return After Trip to China for Stem Cell Transplant

BY Samantha Clemens

December 22, 2008

WARDSVILLE — Claspings his toddler-sized fingers around his father's, a high-spirited Luke Pickett giggles while he and his brother play with their dad.

Luke Pickett, now 21 months old, went to China for a donated umbilical cord blood stem cell transplant. In September 2007, Luke's parents, Clint and Cheryl Pickett, learned he had spastic quadriplegic cerebral palsy, a neurological disorder affecting his muscle tone that causes gross motor delays.

After raising \$30,000 and spending Oct. 4 to Nov. 8 at the Chengyang People's Hospital in Qingdao, which is in northeastern China, Luke and his father are back, hoping for results along with the rest of the family.

"His head control is a lot better," Clint Pickett said while holding his son on his lap. "I don't know if it's because he's gotten bigger or he's just getting stronger, but he just feels like a more solid kid."

While in China, where the nurses always wanted to see Luke's smiling face and referred to him as "Lukey," Luke received two intravenous treatments of cord blood stem cells and five lumbar (spinal) injections.

"The nurses couldn't get enough of him," Clint Pickett said. "I couldn't walk down the hall

without them stopping and holding his hands or rubbing his little face."

The cord blood, which is collected from the umbilical cord and placenta after a woman has given birth, contains stem cells that are being used internationally to attempt to treat various conditions. Autologous transplants use the patient's own stem cells, while allogeneic transplants use donated stem cells from related or unrelated people. Cord blood stem cell transplants are being done in the United States but are not available for cerebral palsy.



*Luke Pickett, 21 months old, laughs while he plays with his dad, Clint Pickett, at their Wardsville home on Dec. 6, 2008. Clint and Luke Pickett went to China for more than a month, where Luke had a cord blood stem cell transplant. Luke's parents hope the treatment will help with his cerebral palsy.*

Although the Picketts said the treatment was a blessing, the process at times left Clint a little overwrought. During the two intravenous treatments, he was able to sit with Luke on a couch while the "yellowish-color" stem cells in "a bag about the size of half a sandwich" transferred into his son. During the lumbar injections, however, Luke was separated from his father.

“They’d take him away, which is kind of hard to do,” Clint Pickett said. “Being in a foreign country and having people you can’t really understand sedate your child was pretty rough.”

Despite the few anxious moments, the time Clint and Luke spent together allowed the opportunity to strengthen the bond between father and son.

“I learned so much about Luke,” Clint Pickett said. “Just taking care of him 24 hours a day, him looking to me for all his meals and bottles — I never got to have that much time with him.” Cheryl Pickett sees that bond now. “He seems closer to Clint to me,” she said, watching her husband play with Luke. “He just seems more attached.”

Although they were missed, Clint and Luke’s month away provided some one-on-one time with Cheryl and Cody, the Picketts’ older son, especially before adding the newest members to their family — twins Ethan and Emily, who were born two minutes apart shortly after noon on Dec. 16. Cheryl and Cody made a paper chain together, ripping off a link each day to signify how many days were left until their boys came home. Cody recognized, as much as a 3-year-old can, where his dad and brother were.

A print of Charles Ebbets’ 1932 photo, “Lunch Atop a Skyscraper,” hangs in the Picketts’ dining room. The iconic image of workers eating on a beam above New York City was a reminder to Cody that “that’s where Daddy was,” Cheryl Pickett said, “because Daddy was in a big city.”

With the family back together at their home in Wardsville, just south of Jefferson City, Luke and Cody play with “diggers,” Cody’s new collection of miniature plastic trucks. Able to sit up with the comforting hands of his father

holding onto his crisscrossed legs, Luke’s beaming smile emerges as Cody laughs uncontrollably while playing with his brother.

According to the Picketts, Luke’s therapists have noted that his head control, sitting and hand movements have improved. “His movement in his hands seem more purposeful,” Cheryl Pickett said. “He can see something, reach out for it and grab it, instead of just whacking at it.”

Clint Pickett said he was told by doctors in China that the treatment for neurological conditions typically shows results three to six months after stem cell transplants, a contrast to some of the more immediate results those with other conditions had in China.

“There were a lot of kids there with optic nerve hypoplasia,” he said of a condition that is usually associated with vision loss. “There was a little boy there from Florida that, after having his first IV treatment, he could see his mom waving her hand in front of his face. Some of those were there, but the other parents there with kids that have cerebral palsy or any other kind of brain injury, we didn’t see as many results right then.”

While in China, Clint collected mementos to bring back to Missouri. Small packets of dried food, a newspaper the day after the presidential election and one keepsake that is a bit more permanent: a tattoo. In Chinese, reading up his forearm, is the symbol for “love” and the names of Cody, Luke, Ethan and Emily — names he and Cheryl kept a secret until they were born.

“It just seemed like a good present to myself, to bring home something that I’ll have forever,” Clint Pickett said. “My kids’ names — I couldn’t think of anything else better to have.”

## Friedreich's Ataxia (FA)

### THE WINDSOR STAR

#### Boxer Heads to China for Stem

#### Cell Treatment

By Monica Wolfson



*Aspiring boxer Zack Ghazali will travel halfway around the world beginning Thursday as he seeks medical treatment to save his life.*

July 1, 2008

"They say don't put all your eggs in one basket," said Bernadine Ghazali, Zack's mom. "We only have one egg. We have to do something."

They are going to Hangzhou Hospital in China to receive stem cell therapy offered by Beike Biotech, which is one of 32 laboratories

worldwide offering stem cell transplants. The procedure is not done in Canada or the U.S. Zack Ghazali, 16, poses for a portrait in his backyard. Ghazali has a recessive gene and has been diagnosed with Friedich Ataxia, a degenerative disease which inhibits the use of his arms and legs. Ghazali is heading to China to take part in Stem Cell Therapy through injections into his bloodstream of cells taken from umbilical cords.

Zack Ghazali, 16, poses for a portrait in his backyard. Ghazali has a recessive gene and has been diagnosed with Friedich Ataxia, a degenerative disease which inhibits the use of his arms and legs. Ghazali is heading to China to take part in Stem Cell Therapy through injections into his bloodstream of cells taken from umbilical cords.

Pawel Dwulit, The Windsor Star

Zack, 16, was diagnosed 18 months ago with Friedreich's ataxia, a rare genetic disorder that weakens the nervous system and afflicts one in 40,000 people. The incurable and terminal disease disrupts co-ordination of the arms and legs, diminishes sight and hearing and can make 80 per cent of its sufferers vulnerable to heart disease and diabetes. Most people are diagnosed between five and 15 years old and live to early adulthood.

Zack, who enters Grade 12 at Lajeunesse high school in the fall, is philosophical about his condition.

"It's just life," he said. "Some good stuff has happened and some bad stuff. You get over it and move on."

He refuses to use a wheelchair or the elevator at school and instead uses the wall to support himself as he walks around.

"I keep strong physically," he said. "I hope to get a lot better. In all honesty, I hope to get better enough for boxing."

He spends hours at the gym. One day last week he stayed in bed all day resting until it was time to haul himself to Fighting Island Boxing Club where he trains.

Last week, Bernadine Ghazali shook with nervous energy. She has the visas and toilet paper packed. She's already paid the Chinese laboratory some of the \$83,000 the trip and medical treatments will cost. Students at Lajeunesse raised \$19,000, while a pasta dinner brought in \$30,000. But Bernadine Ghazali, who works at Malden Park Continuing Care Centre, is still going into deep debt to make sure her son gets treatment, even if it's a long shot.

A stem cell transplant isn't a cure, but Bernadine Ghazali hopes it stalls the disease's progression and helps the thickening of his heart ventricle, which is one of the biggest threats of the illness.

"For the heart, it's almost 100 per cent promising," she said. "It's almost like a guarantee."

Zack's treatments involve injections of stem cells, physical rehabilitation, a bone marrow transplant and acupuncture treatment.

There are no statistics on how many Canadians seek stem cell treatment overseas, said Christina Lawand, spokeswoman for the Canadian Institute for Health Information.

"It's out of pocket, so there is no real way to track it," she said.

The medical community in the West is skeptical about the value of stem cell treatments.

"Our scientists haven't been able to find any peer-reviewed assessment of the procedure," said Ron Bartek, president of the Friedreich's Ataxia Research Alliance, which is based in Virginia. "There might be some short-term bump up, but that's over time and they don't see any evidence the therapy has any lasting impact."

While many people might not have believed the Wright brothers when they said they had built an airplane, stem cell treatments don't fall into the same category, said Dr. Brian Day, president of the Canadian Medical Association.

"We have concerns they are marketing an unproven technology to vulnerable people," said Day, an orthopedic surgeon. "Neurological conditions wax and wane. You hate to see vulnerable people exploited. I can't think if any medical advance that made it's way through this route. I'd be astounded if all the scientific research being done around the world is being trumped by a small corporation in China that is charging its patients exorbitant fees to have treatments done."

Stem cell researchers recently discussed the ethical issues surrounding stem cell therapies at the mid-June annual meeting of the International Society for Stem Cell Research.

"We can't say it's quackery for every company, but for many it is," said Timothy Caulfield, a University of Alberta law professor who presented a paper at the conference. "But for some, they are likely providing services for individuals who genuinely feel it works."

Donations can be made at any Royal Bank of Canada branch in Bernadine Ghazali's name.

\*\*Read about Zack's experience in China and progress fighting Friedreich's Ataxia [here](#).



## Glucose Transporter Deficiency (GLUT-1)



### Stem Cell Injections Helping East

### Troy Girl Cope With Gene Disorder

By Mike Heine

April 6, 2007

HANGZHOU, CHINA-Miracles can happen. Brooke Barels is proof, her mother says.

Brooke suffers from glucose transporter deficiency (GLUT-1), a spontaneous gene mutation that leaves her with cerebral palsy-like symptoms and delayed brain development.

Speech for Brooke is difficult and limited to strings of up to three words. She can't yet walk on her own, and standing without holding onto something is a challenge.

But it wasn't long after a third injection of stem cells on the 20th floor of a hospital in Hangzhou, China, that something happened.

Brooke, without provocation, began saying words she's heard thousands of times but had never uttered herself.

Her mom, Vicki, and aunt Cindy Toman, who took 9-year-old Brooke from rural East Troy to China last month, were in disbelief.

"Cindy and I looked at each other and it's like, 'Oh my God! Did you just hear that?'" Vicki said Thursday, a few days after flying back to the United States. "I knew it wasn't in my head. Cindy was there with me.



*Brooke Barels, left, shares a laugh with UW-Whitewater student Beth Small at the Barels family home in East Troy recently. Small spends a lot of time with Brooke, who recently returned from China after receiving stem cell injections to help her deal with glucose transporter deficiency (GLUT-1), a spontaneous gene mutation that leaves her with cerebral palsy-like symptoms and delayed brain development.*

*Al Hoch/Gazette Staff*

"Brooke's sounds were more clear, and her words are more crisp."

Brooke received six stem cell injections containing about 60 million stem cells developed from the umbilical cord blood of Chinese babies. It's a procedure unavailable in the United States.

The Barels family hopes Brooke will see improvement with her motor skills, cognitive processes and physical abilities.

Doctors said most of the improvements would come in two to six months.



*Working on puzzles is a favorite pastime for 9-year-old Brooke Barels of East Troy. Al Hoch/Gazette Staff*

But Brooke decided not to wait.

Another small miracle happened Thursday at the Barels home.

Brooke looked out her bedroom window and said "ball" and "dog," pronouncing the end sounds of both words. Previously, she would have only said "ba" and "da."

"That was so big," said an excited Beth Small, Brooke's twice-a-week in-home healthcare aid. "She never would have said that before. She's more alert. She pointed to the ball and said, 'ball.'"

"You just see it in here eyes that there's more going on in there. It's so exciting."

Vicki and Cindy witnessed Brooke's first breakthrough. Brooke, a big fan of ice cream,

"All of a sudden started saying, 'Good ice, Mom,' Spontaneously," Vicki said.

"We didn't have to try to get her to say, 'good ice.' Or have to model or cue her or have to repeat it over and over. She was just out with it. 'Good ice, mom.' That's a big improvement for her."

Vicki knows the improvements will come slowly, but that's all they want-an improved life for Brooke.

The family believes the stem cell injections are safe and that Brooke will never regress. The injections have shown improvements in hundreds of cerebral palsy patients, and few have shown ill effects, Vicki said.

"I'm trying to be realistic about it," Vicki said. "I'd love for independent walking, but I'm hoping for improvement in areas where she's more lacking. But we'd welcome any positive change."

Brooke is active and can walk with a walker and climb stairs with help. She even stood and touched her toes three times in a row, also a new miracle.

It's cognitive development where the Barels are hoping for the most improvement.

Hopefully, "it makes it possible to learn at a quicker pace," Vicki said. "She has the ability to learn, but it's such a slow progression of development. It'd be great for her to be able to speed up that process, the thinking process, the memory."

The stem cells will not cure the genetic mutation. But it appears already that the stem cells have helped.

Vicki hopes other families and American doctors will see the progress her daughter has made and will push for approving more stem cell therapies in the United States.

"Now that we've been to China and I see the possibilities and I've seen the patients that are feeling better and doing better and heard the stories about patients who have come and gone from china and are just improving every day, I'm in more of a position now to say I would be more of an advocate," Vicki said.

"If Brook is living proof that this could help kids and disorders, I would want to do nothing but spread the word of awareness and play a role in making it possible for more kids."



## Ischemic Optic Neuropathy



### [Carl Stevens: Home From China](#)

By Joy Robertson

April 2, 2008

Carl Stevens can see, barely. He can see some light.

He can see the shadow of his hand if he holds it close enough to his face. He's thrilled that he can see anything at all.

In 2004 doctors put Carl into a medically induced coma to treat Strep B Penumonia. They figured he'd be out for two days. He woke up eighteen days later, blind.

A family member told Carl about a hospital in China where patients were getting umbilical stem cell treatments to treat everything from ALS to Heart Disease. Carl looked into it and decided to give it a shot.

Doctors in the U.S. and China told Carl the treatment might not work, but it might be his only hope. Carl and his wife Vickie dug into savings and came up with about \$30,000. He left for China on Christmas Day.

Carl and his brother-in-law spent 33 days at Hangzhou Xiaoshan Hospital, where Carl

received six stem cell treatments and acupuncture. He now takes electrotherapy acupuncture treatments at a clinic in Springfield, Missouri.

Carl says he began to see flashes of light after his second treatment. About two months after arriving home he's seen more flashes of light, some in color.



He says he can see the light of a television if he gets right up to it. Time seems to bring hope to the avid hunter and logger who drove a fertilizer truck for a living. He understands that he may never regain normal vision but hopes to at least see faces of family members again.

## Machado-Joseph Disease (MJD)



### Stem Cell Treatment a Miracle For

#### Keslick

By Sheri Monk

August 7, 2008

Last November, Jaysen Keslick was ashamed to leave his home in Taber, Alta., to walk his dog for fear of being called a drunk again. He suffers from Machado-Joseph disease (MJD), a fatal genetic illness that has claimed the lives of his father, uncle, aunt, cousins and grandmother. Despite having lived decades with the constant fear he might also carry the MJD gene, Jaysen is described as kind and lighthearted by his friends and family.

In the prime of his life, at 31 years old, Jaysen began to exhibit the tell-tale signs of the illness. He started losing his balance and had to quit his job hauling rigs for the oil industry. MJD attacks the brain cells which control muscles and movement and his speech began to fail him. Jaysen could not walk without staggering or swallow water without choking on it.

Jaysen's father, Cecil Keslick of Maple Creek, died from MJD in 2004. His aunt Marlene Muhlbeier still lives in Maple Creek. Sister to Cecil, she watched as her mother and all three siblings were taken by the disease. For years, Jaysen's aunt lived in fear of the disease which has ravaged her family. She learned in later

years she was the only sibling who did not carry the gene. Muhlbeier said she knew several years ago that Jaysen would develop MJD when she recognized a glazed look in his eyes, which was a trait shared by all her relatives with the illness.

Karen Derkson, Jaysen's mother, learned of a New Brunswick man with the same disease who had sought stem cell research in China. He returned to Canada as a different man, able to walk without staggering and speak without struggling.

At once, the Keslick family rallied around hope and began fundraising efforts to send Jaysen to China. The media soon caught wind of his struggle and the story was told across the nation. Within a short time and with the generosity of many, enough money had been raised for Jaysen's treatment.

Jaysen wasn't the only Keslick battling MJD—his cousin Jayson had also been struck. The Keslick family planned to send the second Jayson to China if the treatment worked, but he died before treatment began.

At the beginning of November, 2007, Jaysen and his mom left for China. He would receive six stem cell treatments over the course of one month, at a cost of \$25,000.

After just one treatment, Jaysen showed remarkable improvement.

"I could swallow water without choking," said Jaysen. His mother said the immediate change was nothing short of miraculous. She hasn't heard him choke since the first injection of umbilical cord stem cells into his spine.

Stem cells are like flexible building blocks which have no pre-determined destiny and have the ability to become any cell the body needs. Stem cells are harvested from the umbilical cords of newborn babies, which are leftovers from development in the womb.

Jaysen's second treatment was frightening. The anesthetic used to freeze the area didn't take.

"He went into shock. He couldn't talk...he felt the whole procedure, but he couldn't tell them. He was pretty bad that day," said Derkson.

Despite the trauma of experiencing the painful procedure, Jaysen says his care in China was wonderful.

"Every morning, the doctors would come to see me."

As his treatments continued, Jaysen started to come back to life.

"I could see when he was walking up stairs he didn't have to hold onto the rails, he could walk. His eyes had a glazed look and now that's gone," said Derkson.

Acupuncture treatment accompanied the stem cell injections to help direct the stem cells to the part of Jaysen's brain which was being attacked.

Jaysen's treatments continued and so did his recovery.

"His appetite...after his first set of stem cells—I was sick I couldn't stand the smells over there of the Chinese food—but he started eating non-stop. We went to this restaurant and they served lily pad soup and that's exactly what it was—a lily pad floating on hot water—and he ate everything, I couldn't believe it," exclaimed Derkson.

Jaysen's speech is no longer broken and his words are no longer trembled. He can take his dog outside again without being called a drunk and his mom says he's even toyed with the idea of returning to work.

Though much improved, Jaysen still has MJD and his symptoms are not gone entirely. When he is tired, he loses his balance easily, a constant reminder of an uncertain future.

Stem cell research is still so new, no one knows what to expect. The man from New Brunswick went back to China for a second round of treatments, hoping to further improve his condition. Before stem cell research was explored, MJD victims simply waited to die. Now, Jaysen and his family cherish every day, hoping the treatments will last, but still must prepare for the possibility of a return trip to China.

The experience at the Chinese hospital changed mother and son forever.

"You walk around there with goosebumps all the time because there were so many wonderful things—miracles were happening out there and I'm not kidding," said Derkson.

Foreigners from all over the world were being treated at the hospital. Jaysen met a quadriplegic Romanian who began using his arms after receiving stem cell treatments and was able to type on a keyboard before he left the hospital.

Yet despite the optimism, tragedy was a constant companion at the hospital. Jaysen said he witnessed patients desperate for a cure and for another chance at life who were taking a chance on an unproven cure.

"Overall it was humbling. There were a lot of people worse off than I was."

Stem cell treatments are not yet approved in Canada and are not covered by medicare. It is not known if the new stem cells injected into Jaysen's spine will also be affected by MJD in the future, or if the new cells will resist the disease. A growth hormone is added to the spinal fluid carrying the stem cells before they are injected, in hopes of causing the stem cells to replicate once implanted in the body.

If the disease tightens its grip on Jaysen again, he is prepared to undergo the procedures again.



*After spending a month receiving stem cell treatments in a Chinese hospital, Jaysen Keslick (fourth from left) has made a remarkable recovery.*

More money was raised for Jaysen than was needed for the trip, the remainder is locked in an account in case he needs to go back.

“He doesn't have enough for six treatments again, but he's got enough for a few,” said Derkson, who still gushes with gratitude and thanks for all the donations which flowed to the family last fall.

Two Facebook groups are dedicated to Jaysen's cause and can be found by using the site's search engine. One group is called, “stem cells save lives” and the other is, “help get Jaysen Keslick to China.”

Derkson was made aware of the stem cell treatment for MJD through a newspaper article about the man from New Brunswick. Now, the Keslicks are being contacted by others with similar diseases and some are going to the same hospital Jaysen was treated at in hopes of sharing the same positive result. A German woman with MJD left in May for the same treatment—if it weren't for Jaysen's publicity, she might never have learned of the hospital.

Jaysen is seeing a new specialist in Lethbridge who is supportive of the treatments, but the government has shown no interest in monitoring his progress to date.

“There's just so many people going over there right now. Our government should be opening their eyes,” said Derkson. “Our country is one of the richest in the world and there are third world countries coming up with solutions and treatments for these major diseases. I just don't understand it.”

## THE DAILY GLEANER

### Through the kindness of strangers, my kids got their father back

By Jennifer Dunville

August 8, 2007

It has been a triumphant summer for J.C. Haas.

The Geary resident has been swimming, camping and tubing down the Nashwaak River with his family, despite having a rare hereditary illness that deteriorates brain cells responsible for his movement and muscles.

Haas had trouble functioning because of Machado Joseph disease, but an experimental stem-cell treatment he received in China in the spring has changed all that.

Now he and his wife Cherie have opened their private lives to the public to share his success with the treatment, which has improved his quality of life and given him the ability to play with his three children again.

"It cost more than \$30,000 for the treatments and time in China. It was the community and many strangers who helped us afford that," Cherie Haas said. "Now we want to return the favour."

The Haas family has made it a priority to talk publicly about stem-cell treatment. The family has an online blog and encourages e-mails and

phone calls from people interested in the procedure.

Visitors from across Canada have traveled to New Brunswick to see the improvements in Haas since he received injections of stem cells from donated umbilical cords.

"Stem cells can be used for people with multiple sclerosis, Alzheimer's and strokes," Cherie Haas said. "That's why we welcome inquiries by phone and questions from visitors because we see the value of this treatment, even though we know it won't necessarily work for everyone the way it has for J.C."

Julie Allen, Cherie Haas's sister, said she gets teary when she thinks about the changes in her brother-in-law. "It's amazing," she said, pausing to control her emotions.

"It's a dream come true. To see him outside playing with the kids and know they aren't worried about him falling or getting too tired is just so great."

Haas was diagnosed with the disease in 1997. His mobility has decreased over the years to the point where he wasn't far from being in a wheelchair.

The illness, which can be life-threatening, has no known cure. But stem-cell injections, which replace and repair dead cells, can temporarily restore some mobility for people with the disease.

"J.C. couldn't walk without a cane, manoeuvre in the dark, bend over without falling or even keep his balance to go downstairs," Cherie Haas said. "Now he's doing all those things and more. It's wonderful for him and for our children who have their papa back."

Cherie Haas said she's hoping to convince doctors to offer the treatment in Canada, so it's accessible to more people.

"Right now it's only available in China, but there are so many people wondering if they could benefit from stem cells," she said.

"Through the kindness of strangers, my kids got their father back."



## Motor Neuron Disease (MND)

When the nurses heard it was his birthday they brought him a cake and sang 'Happy Birthday'.

**PortadownTimes**

"They were really nice and the treated me so well," Alan said. "I would have no hesitation of going back again. If anyone is unsure I would say they should definitely go. I would go again tomorrow."

### Ballinderry Man Returns Home

#### From China

By MARY MAGEE

October 18, 2008

Alan Stitt (44), who suffers from Motor Neurone disease, spent a month receiving stem cell transplants obtained from umbilical cord blood to repair damaged cells and tissues at a hospital in Quindao near Beijing.

But Alan, who spent his 44th birthday undergoing his first treatment on September 11, is hopeful the treatment has been all worthwhile.

He has been warned the treatment will not take effect for 75 days, but believes he can already see and feel the benefits.

"I feel I can balance better and have more strength in my legs, whether that has anything to do with the stem cells or the physiotherapy I received there I don't know," he said.

"I could not put foot to heel and walk before but I can now. I still have to concentrate when I walk and am unsteady if I go down on a slope but I feel a definite improvement.



*A BALLINDERRY man has returned home after receiving controversial stem cell treatment in China but will have to wait until Christmas to know if it has worked.*

Friends and family rallied round to raise up to £18,000 and the remaining money will help him make the same trip again if needed.

Alan, who went to China with wife Barbara and his mother, had a slight setback at first.

He was suffering from a sore throat so treatment had to be delayed. Once the throat cleared Alan

underwent physio, acupuncture and wave therapy daily, which he found helpful, before he had the weekly transplants.

Alan knows some people are not convinced by the treatment.

"As I told my consultant, who asked me why I would put myself through this - what option did I have?"



*Alan Stitt with nurses from the hospital*

Alan had the chance to meet people from all over the world who were suffering from various conditions but who all hoped the treatment would help. One seven year old child who had been blind from birth was returning home after the treatment and could see shapes.

Barbara praised her husband for taking the brave step to go.

"Alan could have just sat here and done nothing but he went ahead and never complained," she said.

After Alan's spinal injection treatments he had to stay in the same position for six hours and was not even allowed to lift his head for food. Most of the time he slept.

When he did get up he suffered from a 'heavy' headache. But he noticed that a groin injury he

had suffered from since his days as a football player had disappeared.

Alan, who now has to wait until Christmas before he will know if the treatment has worked, also had time to wonder how he contracted Motor Neuron Disease.

"I have been in contact with someone who, like myself, played football all his life, was a kitchen fitter and also contracted the condition," said Alan.

"I don't know it could be the type of glue that you use or the fertiliser used on pitches. I read an article that a certain type of fertiliser could have caused the condition but I don't know. It seems strange that two perfectly healthy men who played football are suffering from this." Barbara said she would like to thank everyone who helped them raise £18,000 and also her employers who allowed her four week emergency leave to travel with Alan.

## Multiple Sclerosis



### Stem Cell Treatment Working,

### Says Patient

By Blair Braitenbach

December 24, 2008

An Okotoks woman who traveled to China to treat her multiple sclerosis (MS) through stem cell transplants said she is already experiencing minor physical improvements.

On Oct. 3, Linda Boyce flew to Hangzhou, China to undergo live birth umbilical stem cell treatment for a month. While at the hospital Boyce received five injections of stem cells in her spine and one through a vein in her wrist in an effort to reduce the symptoms and stop the progression of the disease.

MS is a chronic degenerative disease that affects the central nervous system. The disorder is marked by weakness, numbness, loss of muscle coordination and problems with vision, speech and seizures.

At 48 Boyce is primarily wheelchair bound, and prior to the stem cell treatments could only stand for a short time while holding on to something. Since the treatments Boyce said she can stand for a period of time without any aids and has gained strength in her muscles and legs and has more energy. Boyce said the doctors at the Chinese clinic told her more improvements will come in the next few months.

“It’s slow going but I’m not complaining. It was a great experience,” Boyce said. “It’s not going to cure me or anybody, but it’s going to bring back more of my quality of life.”

Boyce said she also received bone marrow purifying treatments in which some her bone marrow was taken out of her body, cleansed and put back in. In addition, she said a nerve growth factor was administered along with the stem cell transplant to help them repair Boyce’s damaged neurons.

*Linda Boyce gets some exercise at her Okotoks home. Boyce has returned from China where she underwent stem cell treatment and she said she is starting to see some benefits.*  
*photo by Candice Ward*



Boyce also underwent physiotherapy, weight therapy and acupuncture treatments five days a week during her stay in China all while being watched over by upwards of 10 doctors and nurses a day.

“They came in and wanted to check me and ask how I was feeling. I’ve never had that many people in one room at one time who were medically (trained),” Boyce said.

Boyce's decision to seek medical help in a foreign country is not unique, although the form of treatments are considered experimental and controversial by the traditional North American medical community and commonly labeled "stem cell tourism." Okotoks resident Hannah Ellefson has been going to the Dominican Republic with her parents for a number of years to undergo stem cell treatment to cure her severe form of childhood epilepsy. Many North American doctors argue such treatments prey on the desperate and don't provide any substantiated results or "clear proof of benefit."

A fundraiser was held for Boyce in August to help cover some of her expenses to China which came to about \$40,000. Boyce said she is thankful for all the support she has received from the community, especially her former trainer and friend Michelle Cottingham.

While at the Chinese hospital Boyce said she witnessed miracle-like results in some of the other patients. She said a quadriplegic woman regained basic motor movement in her arms allowing her to hold small things and comb her hair following her stem cell treatments.

"It was just amazing watching what was happening to people. I did a lot of crying because you saw so much," Boyce said.

Boyce said ultimately she would like to at least be walking with a cane by spring and be able to drive again. She said those skeptical of her treatment choice might not understand what living with MS and other disabilities is like and shouldn't judge her for going against what the established North American medical community thinks.

"My getting better is going to take time and in time we'll know," Boyce said. "I had many skeptics including friends. If you were in a person's shoes who has a debilitating disease, you'd be willing to try everything. Going to China has been nothing but a wonderful experience. The care was amazing and the doctors were great."

## Optic Nerve Hypoplasia

**Telegraph.co.uk**

### [Two-year-old Girl Can See for the First Time Following Stem Cell](#)

#### [Treatment](#)



*Two-year-old British girl Dakota Clarke can see for the first time after undergoing pioneering stem cell treatment in China.*

By Nick Britten

Dakota Clarke: Two-year-old girl can see for the first time following stem cell treatment

March 4, 2009

Dakota, who was born blind, is the first British patient to undergo the new type of therapy.

The £30,000 treatment, which involves stem cells taken from an umbilical cord being fed

into her forehead, has allowed her to see people, objects, colours and lights around her.

Dakota suffers from Septo-Optic Dysplasia, which means the optic nerve does not develop properly, and has responded quicker than expected to the treatment. Her parents, Wilma, 28, and dad Darren, 34, are hoping she will continue to improve and have a life time of sight.

Speaking from the Qingdao People's Hospital in southern China, Mrs Clarke, from Newtownabbey, near Belfast, said: "We didn't know if the treatment would work, and people kept telling us it was too experimental, but we had to do this.

"It's been worth every single penny to see the changes in her."

Mr Clarke added: "It's nothing short of a miracle for us. She can see the world for the first time.

"Last week she pointed at a hairbrush across the room and shouted 'brush'. I almost cried with happiness.

"Her balance is so improved and she can now walk beside me only holding on with one hand. Previously she would veer in circles and fall over."

Dakota, who has an older brother, Jake, nine, nearly died at birth and has spent much of her life in hospital.

Her condition meant she was registered blind, had poor growth, balance issues and needed two people holding her hands to help her walk.

She also had severe bowel problems and could not use the toilet herself.

The technique the doctors in China used is referred to as IV, where the stem cells are injected intravenously into her bloodstream. They then repair the damaged cells.

After just three weeks of stem cell treatment she can now see, her eyes are tracking together for the first time, and she is able to recognise people and objects without touching them.

She can also walk with just one parent holding her hand, and is using the toilet easily without the help of medication.

In their search for help for Dakota, the family exhausted the medical options in the UK before setting up a fund and raising £30,000 for the treatment.

They eventually found a clinic in China run by Beike Biotech, an American research company contracted to provide experimental stem cells for treatment at twenty-four hospitals in China.

Jon Hakim, its head of communications said: "We didn't think IV alone could make such dramatic improvements. But Dakota's experiences are making us completely rethink our use of IV."

Only about 15 people worldwide have tried the new treatment in China for Dakota's condition.

The first was five-year-old American girl, Rylea Bartlett, who was completely blind before July 2007, but now is able to read the top line of letters in an eye test.

Dr Tom Liu, a stem cell specialist and director of the centre, is planning a breakthrough medical report on its work in collaboration with UCLA to be published later this year.

He said: "We are very impressed with Dakota's progress so far and hope further tests will reveal further improvements.

"The use of stem cells taken from the umbilical chord is completely safe. As we learn more about the way these cells work our results are getting better and better."

Doctors in the UK have expressed concerns that the treatment is unproven and may not have lasting effects.



## Life of Blindness Now Getting

### Clear

Teenager finds success in China from treatment with stem cells

By HALLIE WOODS

February 15, 2009

Macie Morse turned 16, got her learner's permit and got behind the wheel.

That's big news for any 16-year-old, but it's a huge deal for a young girl who a year ago was nearly blind.



*"It was one of the most exciting times of my entire 16 years," Morse said, sitting at Poudre High School, where she is now a sophomore.*

*Poudre student Macie Morse, 16, and her mother, Rochelle, are pictured in the van Macie is driving. Morse, who received her instruction permit in January, was born blind but had experimental stem-cell treatment in China last summer and can now see. (Rich Abrahamson/The Coloradoan Rich Abrahamson/The)*

Until she was 15, Morse had 20/4,000 vision in one eye and only light perception in the other due to optic nerve hypoplasia, or an underdevelopment of the nerve that transmits vision signals from the eye to the brain. She could make out human figures but not see details, could only read if the paper was within inches of her eye, and could only watch TV standing with her nose pressed to the glass.

Having 20/4,000 vision means that if Morse were tested on an eye chart, she could see things from 20 feet that an average person could see from 4,000, said James Thompson, an optometrist and owner of Advanced Eye Care in Fort Collins.

Someone with 20/30 vision can see from 20 feet what the average person can see from 30 feet.

Thompson said usually he stops at 20/400 and will mark a person with vision as "worse than 20/400."

Light perception means the eye can pick up images only if there is light in a room but cannot see anything.

"I've always wondered what it would be like to lay on the couch and watch TV," she said. "It looked so comfortable."

Now after experimental stem-cell treatment, Morse has 20/80 vision in one eye and 20/400-plus in the other.

"I always wondered what it would be like to see my friends," she said.

### **A trip to China**

After spending most of her life feeling very concerned and protective of her daughter, Rochelle Morse was researching on the Internet

when she found information about an experimental stem-cell injection treatment in China.

With an underdeveloped optic nerve, there are few treatments available.

“If the optic nerve isn’t healthy, glasses aren’t going to do anything for anybody,” Thompson said.

Only 10 people had ever completed the treatment and it was very costly — \$40,000, not to mention travel costs to China.

Rochelle Morse sought help from the community, family and friends, and before the money was raised, she booked the plane tickets and enrolled her daughter.

“I knew we would make it,” Rochelle Morse said.

After raising \$15,000 from community donations, the mother and daughter set out for China on July 4.

Though both said they were nervous about the new treatment, they knew it was their only chance to see Morse’s life improve. She had few friends, bad grades and didn’t know where else to turn.

“I was scared and nervous, but I tried to be strong and to be like ‘This is my opportunity. I’m ready to do it,’” Morse said.

She received spinal injections of cord blood stem cells each week for six weeks. After her third treatment, she realized she could read and knew the treatments were working.

“I yelled, Mom, stop talking, you have to see this,” Morse said.

She made her mother write out words on a piece of paper and hold it far away so she could read it back to her.

Over the next few weeks and months, her vision gradually improved.



*Poudre High School sophomore Macie Morse, 16, drives around Poudre High School as her mother, Rochelle, rides in the back seat following school on Thursday. (Rich Abrahamson/The Coloradoan)*

“She looked at me and said ‘Mom, I know that you have green eyes,’” Rochelle Morse said. “That was a huge step for her in making that human connection. They say you can see the soul through the eyes.”

### **Able to drive**

After Morse turned 15 in January 2007, she asked her mother to go get her driver’s permit.

“It was just the devastation of telling her no, she couldn’t get one,” Rochelle Morse said.

To drive, a person must have a minimum of 20/40 vision, Thompson said.

Wearing a monocle, Morse’s vision is 20/30 in her right eye.

On Jan. 26, just days after her 16th birthday, Morse applied and got her driver’s permit.

“I love it,” she said. “My new hobby is driving.”

She also speaks about her experimental treatment and what it did for her life.

Rochelle Morse said she has begun to see her daughter, who has always wanted to be a veterinarian, blossom into an independent young lady.

“Before, I was always one step behind her, keeping an eye on her,” Rochelle Morse said. “Now I can let her be free. She’s going to be fine.”





## ['No Regrets' for Boy's Experimental Stem-Cell Treatment In China](#)

By Gary White

The parents of an Auburndale boy say they have no regrets about taking the 5-year-old to China for an experimental stem-cell treatment.

December 26, 2008

The parents of an Auburndale boy say they have no regrets about taking the 5-year-old to China for an experimental stem-cell treatment.

Xavier was diagnosed at age 2 with optic nerve hypoplasia, a congenital condition that left him legally blind. Cindy Carballo said her son has shown significant improvements in vision since he was treated this fall at a hospital in Qingdao, China.

"He has improved dramatically," said Cindy Carballo, 23. "We just keep seeing more and more differences in him, as far as balance, coordination and understanding even of conversation. He's way more independent than he used to be. He's so happy; we're happy."

Carballo said she learned about the experimental treatment on the Internet two years ago and contacted a representative from Beike Biotech, a company that coordinates with foreign hospitals to offer treatments. She left her job as an admissions coordinator at a rehabilitation center to concentrate on raising money for the trip and the treatment, which totaled about \$30,000.

Carballo said the family failed to raise the entire amount and wound up taking a loan.

During 30 days of treatment, she said, Xavier received six infusions of medication containing stem cells harvested from umbilical-cord blood, three through injections into his spinal fluid and three intravenously. Carballo said she has worked in medical facilities and was impressed by the hygiene in the Chinese hospital.



*Cindy Carballo plays with her son Xavier, 5, at their home in Auburndale.*

*ERNST PETERS | THE LEDGER*

Xavier was required to lie flat for six hours after each treatment, with doctors warning that movement could cause severe headaches. Carballo said Xavier's only side effect was a fever after his final session. She said the doctors supplemented the treatments with some traditional Chinese methods, including acupuncture.

"I noticed a difference after the first IV treatment," Carballo said.

She said Xavier was unable before the trip to visually track a doctor's moving finger. A few hours after the first infusion, she said, she tested him and he followed her moving finger with his eyes.

She said another dramatic moment came when the pair returned home and met husband and father Esteban Carballo in the Orlando airport.

"I told everybody to be quiet; I wanted him to go right to his dad," Cindy Carballo said. "He was maybe 4 yards in front of his dad and he got so excited, he yelled 'Papi.' He never would have been able to do that before. You had to be right in front of him for him to identify you before."



Xavier's ophthalmologist, Dr. Jack Guggino of Tampa, said he did a baseline exam on the boy before the trip to China and after his return. He said before the treatment Xavier could only detect hand motion at 1 to 2 feet, and after the treatment he could count fingers at 3 to 4 feet.

"As far as Xavier is concerned, there has been definite and measurable improvement, neurologically and ophthalmologically," Guggino said.

Carballo said Xavier, who had been learning Braille, is now showing interest in printed books. She said she plans to switch him from

Karen M. Siegel Academy, a school for students with disabilities, to a mainstream school in January.

Doctors in China told Carballo her son's improvement could continue for several months following treatment.

"I didn't really have much hesitation," Carballo said. "It's a cure, and you want to go get it. It's not really much of a choice. It's a shame we've got to spend \$4,000 or \$5,000 just for plane tickets to get our kids treatment."

## Rulo Family Returns from China

### Stem Cell Trip

By JOE DUGGAN

November 8, 2008

A Rulo couple who took their oldest son to China for experimental stem cell treatments say they have seen promising signs during the past month.

The family of Robbie and Amanda Sipple left for Qingdao, China, on Sept. 30 and returned to their home in Rulo Oct. 30.

Their 6-year-old son Kasen — who suffers from blindness, a developmental brain disorder and autism — received a series of six stem cell infusions at a Qingdao hospital. The stem cells were harvested from umbilical cord blood.



*Amanda Sipple holds her youngest son, Kyler, as Robbie Sipple plays with their oldest son, Kasen, at the family's Rulo home. (LJS File)*

While many Western scientists and doctors strongly doubt the effectiveness of the treatments, the biotechnology company that administers the therapy says it has improved

vision for the 30 American patients who have received it.

Robbie Sipple said Thursday that while they were still in China, he and his wife, Amanda, saw such encouraging signs as Kasen reacting when doctors shined a flashlight in his eyes.

“He would close his eyes and say, ‘Don’t,’” his father said. The boy has been blind since birth. Although doctors had suspected the boy could tell light from shadow, he never reacted to intense light before, his father said.

In addition, they said, they saw general improvement in Kasen’s autistic behavior and a significant increase in his appetite. Kasen has below-average growth because of hormonal problems and getting him to eat often has been a struggle.

Chinese doctors told the Sipples it could take several months for the stem cells to fully take effect, Robbie Sipple said. At some point, he said, they will have the boy examined by his Nebraska doctors in an effort to quantify any improvements.

The biotech company administered two stem cell treatments by IV and four by spinal tap. The young patient had no complications from the treatments, Robbie Sipple said. They also took their two younger sons on the trip, and Amanda Sipple’s mother went along to provide support and child care.

In between Kasen’s treatments, the family had time to explore Chinese culture and food. They also met other American families seeking treatment for disorders American doctors say can’t be cured.

“It was a very good experience,” Robbie Sipple said.



## Brandon's Fight for Sight

By Jennifer Brown

November 22, 2008

EL PASO COUNTY - A young blind boy, his parents told he'd never see, then they were given hope after a story they saw on Newschannel 13 about a procedure given to a girl also suffering from optic nerve hypoplasia. The community of Southern Colorado came together raising more than \$50,000 for Brandon Stewart to get to China, the only place the procedure is available. The six weeks in China came with their share of ups and downs.

When you first met Brandon his story touched your heart when he simply said, "My eyes are broke." After months of fund raising on August 8th the Stewart's were finally off to China. Once they landed in the strange land it was directly to the hospital where stem cell injections began. "The 1st treatment was IV they wanted to make sure that everything was okay that he didn't have a reaction to it." said Brandon's mom Katrina.

The IV treatment went well. Then after a few days doctors were ready to try injecting the stem cells into Brandon's spine. First they had to run some tests and when checking his brain pressure all their hopes for his sight came to a screeching halt. It was discovered the pressure on Brandon's brain was way above normal and before more treatment could be done the Stewarts had to travel to another city for further testing and were told the chances were very slim they could proceed.

"I was devastated. I knew that all of our hard work, our effort, the community's help had gone down the drain and I didn't know how to cope with that on top of finding out there's something wrong with Brandon." Katrina remembers. After nearly a week with no answers and lots of tests the doctors said they could proceed but the chance of seeing any improvement in Brandon's sight were slim. "He said the worst case scenario Brandon will be blind." explains Katrina.



With that they decided to continue with the treatment. After the fourth treatment Brandon and Katrina were relaxing in their hospital room. Katrina was looking at family pictures on the computer. "We were just hanging out and Brandon said oh who's that, he saw the computer pictures." At that moment it clicked for Katrina the treatment had made a difference.

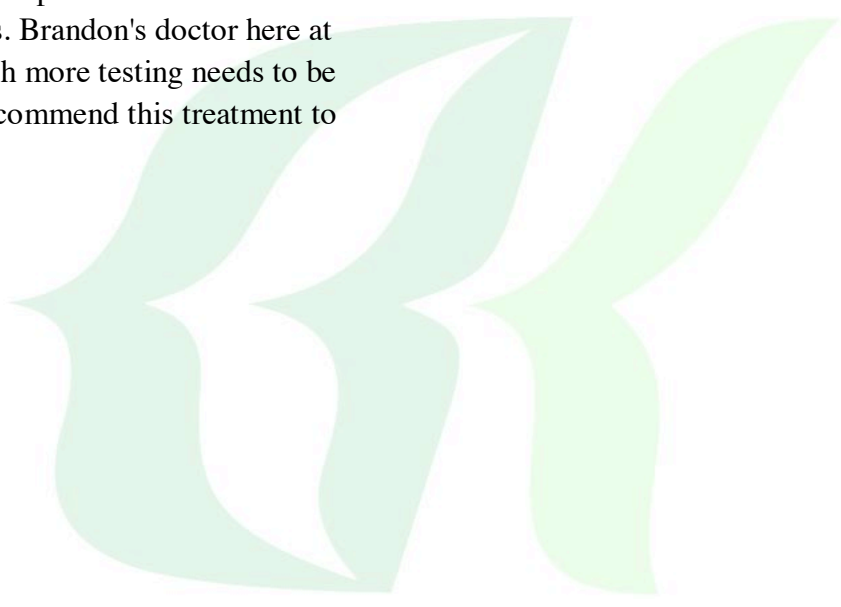
Since that break though Brandon has learned the alphabet by looking at very large print. He can also recognize pictures on flash cards. A feat that even surprised his doctor at home who is still very skeptical of the treatment. "He's seeing better you know objectively he's seeing better." said Dr. Dave Lee from The Children's Eye Center.

His teachers see a difference in the classroom. "He was able to find the curb when he walks

around he doesn't bump into things." said his teacher at the Colorado School for the Deaf and Blind, Amy Gunning.

Brandon's vision is still far from perfect but this improvement is enough for the Stewarts. "He's happier you see it in his face and when he's outside running and not worried about tripping overstuff it's nice to see that on his face." says Katrina. The little boy who told us his eyes were broke now says, "They're better."

Doctors in China say Brandon can expect to see improvements for up to a year. The Stewarts are considering another trip back to China for more stem cell treatments. Brandon's doctor here at home still says much more testing needs to be done before he'll recommend this treatment to any patients.



## Schizencephaly



### Stem Cell Miracle

By Sylvia Schon

January 4, 2009

AMITE — Connor Corkern, a stem cell recipient just turned 2 and is seeing more, playing more and even eating more.

The family plans to take part in a Florida rally in March to impress President-elect Barack Obama about the use of stem cells to combat disease and disability.

Connor's progress since getting stem cell transplants six months ago is little short of a miracle, say his parents, Coye and Katie Corkern.

"He's doing great. He is doing wonderful. It's like we've got a totally new baby," Coye Corkern said Wednesday.

Grandpa Kenny Corkern agrees.

"He's doing things I never thought he would do," he said. "And he's picking up on things a little faster, and he's getting around better. I can't say enough about him and his mom and daddy, how they take care of him. And I can't say enough about the people that helped."

Connor was born blind and hormone deficient because of two rare conditions — congenital panhypopituitarism and optic nerve hypoplasia.

In July he and his parents traveled to China for a series of stem cell transplants — the only option known that had a chance to help him.

Numerous charitable events were held in Tangipahoa Parish to help the Corkerns pay the \$62,000 cost of the trip and procedure.

And there was no guarantee it would work. Some even warned about possible side effects.

But all is well and progress is obvious since the procedure.

Coye Corkern said tests show Connor's optic nerve has actually grown from the size of an ink pen's center to about the size of a spaghetti noodle.

When he sleeps and someone turns on the light in the room, Connor wakes up and sits up in bed, Katie said. Turning on the light never phased him before the implants.

"His vision therapist says he can see shadows and large movement," Coye said.

The little boy also seems much more aware and in touch with the world around him, reacting, responding and sometimes rejecting.

"We notice that when we give him medicine at night, he pushes it away," Katie said. "We don't tell him it's medicine time, but he pushes it away every time."

Connor plays with his toys and older brother Aaron.

He's also trying hard to walk with the help of a walker.

He eats the same food as the rest of the family at meal time whereas before he would choke on anything except the smoothest baby foods.

"He's just improving in so many ways. He just keeps improving," Katie said.

Connor is starting to put words together.

"He's a mocking bird. He mocks every sound we make," Katie said. "We say, 'I see you' when we play with him and we think it's ironic that now he says, 'I see you.'"

Katie admits to thinking about going back to China or to Thailand, which also offers the procedure currently banned in the United States.

"I think what if he got a few more transplants, what else would happen," she said.

Veike Biotechnologies, the company that offers the procedure in China and now Thailand, is taking part in the March rally in Florida and hopes all the American families that made the trip will be there to support the effort.

"We're hoping to make an impact with that," Katie said.

## Spinal Muscular Atrophy (SMA)

**GazetteXtra.com**

[Stem Cell Treatments Help](#)

[Janesville Boy](#)



By GINA DUWE

*Brandon Meinke is held upright in an Easy Stand, a device that keeps him standing to strengthen his muscles for up to a half hour at a time at his Janesville home.*

*Brandon Meinke strengthens his legs with a stationary cycle. His grandmother Sharon Vaughan and sister Taylor Bonczyk look on.*



December 14, 2008

JANESVILLE — Gripping a small folding chair as he pushed himself up, 4-year-old Brandon Meinke flashed a smile.

Slightly hunched with his hands pushing on his thighs, Brandon stood with his feet flat on the floor, something he couldn't do just months ago.

"If I move, I fall down," said the blue-eyed boy.

But standing on his own is improvement and success for Brandon, who has spinal muscular atrophy. Brandon continues to improve since an October visit to China, where he received four stem cell injections and intense physical therapy.

The Janesville Gazette first wrote about Brandon and his family in September, when they were raising money for the \$20,000 cost of treatment and travel. Seven weeks after their return, Brandon's grandparents, who raise him in their Janesville home, said the trip was worth every penny.

"Absolutely," said Sharon Vaughan, who went to China with Brandon and his other grandmother, Tina Pufahl.

### **Treatment**

The genetic disease affects Brandon's motor neurons. He is missing the gene that produces a protein to protect his nerves, leaving his nerves

to deteriorate and die, causing paralysis, said Ron Martin, Brandon's grandfather.

Before the trip, the muscle tone in Brandon's legs was gone, so he couldn't support himself, Martin said. He crawled or rode in a wheelchair.

At Qingdao Cheng Yang Peoples Hospital in Qingdao, China, Brandon received a stem cell injection into his spine every four days with physical therapy in between. It's a procedure unavailable in the United States.

"You'll see instant results, but it really takes eight to 12 weeks to really get the impact," Vaughan said.

Injected stem cells—the cells Brandon received were from umbilical cord blood—migrate to the problem and program themselves to do whatever the body is missing, Martin said.

After Brandon's second injection, he was able to pull himself up along the bed and walk around it, Vaughan said.

"He hadn't done that in over a year, two years probably," she said.

The treatment cost \$20,000. The family raised enough money to cover the treatment and costs while in China, but they still are paying off more than \$4,000 in airline tickets.

Brandon became a star while sightseeing. Chinese people were infatuated with his blond hair, and teen girls wanted pictures with him.

"He got really used to a lot of attention," Vaughan said.

## Progress

Just like any 4-year-old, Brandon makes up conversations between two of his superhero figures, he attends preschool and he looks forward to riding the new bicycle his grandpa had waiting when he got home from China.

*Brandon Meinke stands tall and supports himself with his hands on his knees in the living room of his grandparent's home in Janesville.*

*Brandon went to China in October for stem cell injections to improve his spinal muscular atrophy.*



"I'm going to do tricks," he said of riding his bike.

Since returning from China, he can peddle a bike and do something he never could before—climb stairs. During therapy in Madison, Brandon pulled himself up, held on to railings with both hands and walked up a flight of stairs that were half the size of normal ones.

"He's never, ever done that," Vaughan said. "It shocked all of us because I've never seen him do it."

Therapy is helping Brandon strengthen his leg muscles, knees, and ankles. If he tried to stand months ago, his heels would raise only an inch because of the atrophy of his muscles.

In China, Brandon got three hours of therapy a day, but the family's insurance pays for only

two half-hour sessions a week here. That's leaving the family to do as much as they can on their own.

Martin plans to build some of his own therapy equipment, including a set of the 3-inch stairs.

Brandon stands daily in a device that stretches and strengthens his muscles, keeping his shoulders, hips and knees in a straight line, sometimes while doing electro stimulation, too.

### **A new family**

Since the first newspaper story, the couple has fielded media calls and contacts from other families in similar situations nationwide.

Martin and Vaughan trade stories about parents they've talked to and joke about the "Waltons in China," referring to the bonds they formed at the hospital with other families receiving the same treatment.

"I think they just wanted to know somebody that (went) over there and find out what happens. It's not a scam," she said.

When Brandon received his diagnoses, the family was told, "This is what it is, this is what's going to happen, and basically that's your only option, and you have to deal with it," Martin said.

"I don't think either one of us were willing to accept that," he said.

Martin said it was unlike him to ask for financial help for the trip, but he knew it was beyond his means.

"If we're helping other families in the process," he said, "then I guess that's a way of paying it back."

---

Nearly two years after her trip to China for stem cell injections, Brooke Barel continues to do well and maintain her improvements, her mother Vicki Barel said.

Brooke, 11, has glucose transporter deficiency (GLUT-1), a spontaneous gene mutation that leaves her with cerebral palsy-like symptoms and delayed brain development.

Brooke received six stem cell injections in March 2007 at Xiaoshan Hospital in Hangzhou, China. Before that, speech for Brooke was difficult and limited to strings of up to three words, and she could only walk with a walker.

Since the stem cell therapy, Brooke's motor skills increased, she's made cognitive improvements and she's walking with a cane.

Words spill out without modeling, Vicki said.

"I would say at this point, we're seeing somewhat of a plateau in her gain," she said. "But I feel pretty lucky."

"Looking back, I'm so glad we went," she said.

Brooke is one of only 120 children worldwide with GLUT-1.

She continues intense therapy in and out of school. She's also part of a study at Columbia University in New York City that's following the development of children with GLUT-1.

"They're really keeping a close follow on how they're responding to different interventions," Vicki said. "The goal is some kind of gene therapy success with them."

“She’s showing us that we made the right decision,” Vicki said.



## Septo-Optic Dysplasia



### Blind Girl Can See for the First

#### Time

By Mike Bush

KSDK -- Just 45 minutes from St. Louis, the small town of Highland, Illinois is as American as Mayberry. While you won't find Barney Fife or Aunt Bea, you can find hope there.

January 28, 2009

At Highland Primary school, seven-year-old Claire Wright works with her vision specialist. She was born blind.

"She has a condition called Septo-optic dysplasia," says her mother, Jennifer.

The disorder means she has underdeveloped optic nerves, not enough to process light to the brain. While she may not have her sight, she has plenty of personality.

"Claire is a little spitfire," her mom says.

She loves to play the drums, loves to sing, and loves to dance with her sister Lauren.

The Wrights were told there was no cure for Claire's blindness, but then her father saw something in the newspaper one morning that he could not believe.

"He came out here and he was crying," says Jennifer.

In the newspaper was a story about a little girl who traveled all the way to China for a new kind of treatment.

"All of a sudden this article when I opened it up and start to read it, all of the characteristics, Claire's diagnosis, everything, like word-for-word, it was if I'm almost reading an article about Claire," says her father, Jeffrey.



Six months later, after a lot of homework, and bake sales and dozens of other fundraisers, Claire and her mom went on their own 7,000 mile journey to a hospital in Hangzhou, China.

"We owe so much to the wonderful, generous people of Highland," Jeffrey says.

Jennifer says the doctors spoke Mandarin, but they had translators with them.

"Our floor was an international floor," she says.

The controversial treatments are unavailable in the United States because they involve stem cells.

"I knew it was a political thing in the United States," says Jennifer. "So if that was the only thing that was going to stop it from having it here then we would go elsewhere."

For 31 days, through IVs and injections, Claire received not embryo but umbilical cord stem cells from healthy Chinese babies.

"They're flown in fresh from the lab," says Jennifer.

Scientists believe that stem cells can regenerate tissue, but critics say the treatments are unproven and lack proper oversight.

"We actually tried to set our expectations low," says Jeffrey.

When most people come home from China they talk about the Great Wall or the Forbidden City but the Wrights can't stop talking about the miracle.

For the first time in her life, Claire can see colors.

"Just the idea that we'll now hear her say I'm using my vision to see this," says Jeffrey. " She can see blues and reds and greens. It's amazing! That's not to say that she will ever be able to drive a car or anything like that."

Even a little improvement is a big deal.

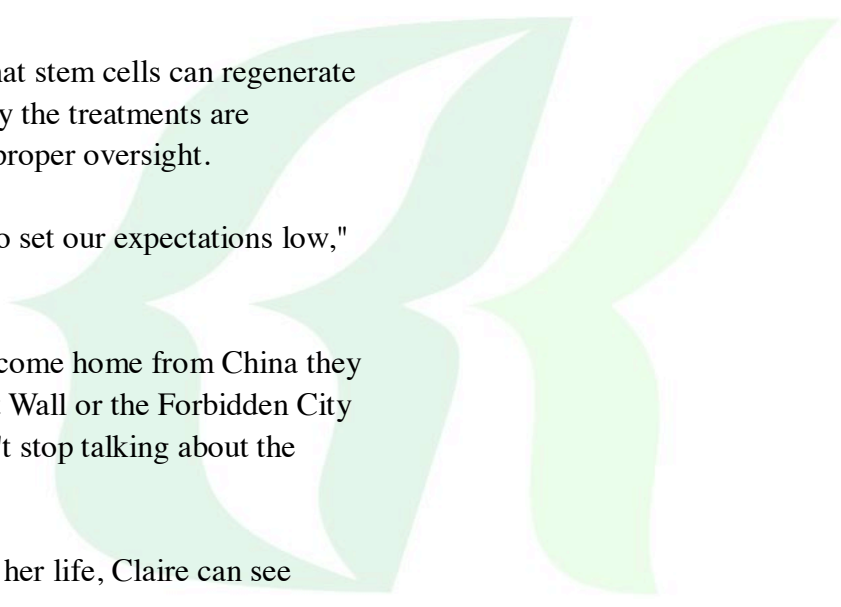
If you ask Claire why she went to China, she says, "To get my stem cell treatments and get my eyes fixed."

The Wrights hope that these treatments will be available in the United States one day soon, but if not they plan to go back to China.

"You have to give that child a chance," says Jennifer.

One little girl, going thousands of miles for the gift of sight, and a family with a new vision of her future.

"At least we will know when we leave this planet," says Jeffrey, "that we gave it a shot for her."



 THE DAILY NEWS TRANSCRIPT

## Stem Cell Treatment in China

### Helps Restore Girl's Sight

Blue Springs South High School wrestling coach Doug Black and his 6-year-old daughter Lydia spent five weeks in China for her to receive a special stem cell treatment in hopes of helping her gain sight.

By Brad Fischer

June 16, 2008

Blue Springs, Mo. — Doug Black found out his daughter Lydia was blind when she was just 3 months old. Doctors told him there was no cure and no hope that she would someday see.

“They were very adamant about it,” said Black, wrestling coach and special education teacher at Missouri's Blue Springs South High School. “They told us, ‘There is just nothing you can do.’”

Now at 6 years old, Lydia is part of an experimental stem cell treatment that has already begun to give her vision that she never had before.

Earlier this year, Lydia underwent stem cell treatment in Hangzhou, China, under the care of Beike Biotechnology.

The treatment uses stem cells from umbilical cord blood. During her five-week stay, Lydia received four spinal injections and one intravenous injection of umbilical cord stem cells.

Lydia's blindness is caused by a birth defect, septo-optic dysplasia. It's a rare birth defect

characterized by the underdevelopment of the optic nerve, deficiency of one or more hormones of the pituitary gland and the absence of a midline part of the brain. In some cases, the disorder can also cause intellectual disability, though retardation did not present itself in Lydia. Doctors hope to develop the optic nerve, the nerve that transmits information from the retina to the brain.

Stem cell treatment for vision problems is not available in the United States.

Lydia's mother, Juli Olmstead, with whom Lydia lives in Columbia, found out about the treatment after getting a phone call from her mother. Her mother told her about a magazine article that she

read about another girl with septo-optic dysplasia who had received treatment and had gained some ability to see.

Olmstead made some phone calls to other people who had already gone overseas for the treatment and did a lot of research before applying to get Lydia treated by the Chinese company.

Beike Biotechnology is funded by Beijing University, Hong Kong University of Science and Technology, Shenzhen City Hall and the China State National Fund. The company has been focused on stem cells since 1999 and has



been treating patients with stem cell injections since 2001.

Kirshner Ross-Vaden, vice president of the Foreign Patient Division and lead medical consultant for Beike Biotech, said in an e-mail that 15 children and one adult have been treated for optic nerve disorders, with all showing some vision improvements. Beike also treats patients with many problems including cerebral palsy, brain damage and Parkinson's disease.

Some American physicians are wary of using stem cells to treat vision problems.

Dr. Ian MacDonald, an ophthalmologist and geneticist at the National Eye Institute, part of the National Institutes of Health, is skeptical of using stem cells to treat septo-optic dysplasia because of the complexity of the optic nerve. The optic nerve is made up of thousands of axons, which are tiny fibers that are used to transport information from the retina to the brain.

"Stem cells are ideally suited for cells undergoing constant renewal, such as bone marrow," MacDonald said. "If you transplant cells, what would enable those neurons to actually hook up in the right pathways and enable vision? What would guide the axons to line up in their proper locations?"

MacDonald said the experimental stem cell treatment is not available in the United States because there has been a lack of experimental work done to enable human experimentation. MacDonald says the overseas companies have bypassed the experimental phase and gone directly to humans.

"In the U.S., the basic scientific studies that would enable us to (use stem cells to treat humans) have not been done," MacDonald said.

"The animal work has not been done to treat an animal model and then undergo human trials."

He said strict experimental protocol in place in the U.S. would block any human trials without animal testing having already taken place. Considering this, he said it will be a fairly long time until stem cell treatment will be done for vision problems in the U.S.

MacDonald said he would not recommend a patient undergo stem cell treatment because, without animal testing, the procedure is unproven.

Black, Olmstead and Lydia traveled to China on Jan. 8 to begin stem cell treatment and returned to Missouri on Feb. 7. About a week after Lydia's first treatment, Black noticed the first sign that she was beginning gain sight.

"We were at the hospital in China, and they had this Christmas tree," he said. "It had lights on it, and it was right behind the nurse's station. We were just walking and she stops and she points, what's that? She could see the actual Christmas lights blinking on and off.

"It was pretty amazing. My heart just kind of dropped. I got a little bit emotional."

Since returning from China, Lydia's vision has gradually improved. The doctors who treated Lydia said they expect her vision to improve for up to 18 months after treatment. Black said the treatment is already having a huge effect on her life, and he is glad that she was able to receive stem cell treatment in China.

"(Before the stem cell treatment) Sometimes she would get in a big hurry and she would run into a wall," Black said. "She'd say, 'I hate that wall. I hate that. It hurts.' You know that's sad. Now when you see her start to run around again,

she stops and you can see that it's working. When it's hard on us, who knows how hard it is on her? I know I'd do anything for her, and I know her mom is the same way."

Before treatment, Lydia could not see anything. She only had a small amount of light perception. Lydia was so light-sensitive that she had to wear sunglasses everytime she went outside.

Since the treatment, Lydia recently has started to see silhouettes and can go outside without sunglasses. During a recent test involving two balls of different colors, she was able to tell that they were different colors, though she could not tell what colors they were.

Who is the first person Lydia wants to be able to see? Black said that when asked, Lydia would tell you, "Ryan Seacrest." No matter what time she goes to sleep on Friday night, Black says she will wake him up on Saturday morning at 6 a.m. to listen to "AT 40" hosted by Ryan Seacrest. She says, "Is my show on yet?"

Black said Lydia sees a doctor in Columbia, Mo., for follow-up appointments every few months. Soon, she will begin the next phase of treatment using a hyperbaric chamber. Black estimates that there is an 80 percent chance that she will have to go back to China for more stem cell treatments.

Lydia's vision improvements have come at a high financial cost. Since the stem cell procedure is experimental, none of the costs were covered by health insurance. Black said the price tag of the treatments and travel for the five-week trip to China ended up totaling around \$35,000.

The upcoming hyperbaric chamber procedure will cost \$5,000 every week.

Many people from the Blue Springs community and across the state have helped pay for the immense costs. Her parents created an organization called Lydia's Lights to gather funds and make people aware of Lydia's needs.

Black said Lydia's Lights has held several fundraisers in Blue Springs as well as in Columbia, such as poker nights and restaurant benefits. Lydia's Lights has also received a large sum of money through donations from the public as well as sponsorships.

"It's awesome," Black said. "Just when we got back, seeing the list of people that have been gracious enough to give; some people I don't even know. People are just willing to give and it's pretty incredible."

# THE MORNING NEWS

## Therapy In China Gives Blind

### Arkansas Girl Some Sight

By Joanne Bratton

June 14, 2008

MOUNTAIN HOME - When 9-year-old Kacie Sallee saw her father's face more clearly for the first time in her life, she had a question.

"She said, 'Is that what he looks like?'" said her mother, Marinda Sallee.

Kacie, who is blind, returned last week from China, where she received umbilical-cord stem cell treatment in hopes of improving her eyesight. The nearly four-week trip and medical treatment was paid through \$60,000 in local donations.

Kacie was born with septo-optic dysplasia, an underdevelopment of the optic nerve and pituitary gland. She could see bright colors out of her right eye but only light and dark out of her left eye.

During treatment overseas, her family started noticing improvements. Kacie looked at a photograph of her father, Stephen Sallee, on the computer, and saw his eyes and mouth were more defined, Marinda Sallee said.

"Before, she would look at a face and say it had spots on it," she said. "It's little things, but for us, it's huge."

Now, Kacie is starting to see bright colors out of her left eye, which she could never detect before,

Sallee said. She also can count fingers when they are held about four inches away from her face, she said.

Her family also is noticing a difference in the way Kacie uses her eyes. Before, she looked down most of the time, but now, she looks up and appears to watch more, Sallee said. At a local park Wednesday, Kacie seemed to watch her brother swing, her head moving back and forth.

Kacie, her mother and grandmother stayed at Chengyang People's Hospital in Qingdao, China. Kacie received four spinal and one intravenous umbilical stem cell transfusion by Beike Biotech.

The stem cells were obtained from umbilical cords of healthy babies and were not embryonic stem cells from a human embryo.

Umbilical stem-cell treatment is not approved in the United States for her condition, experts have said.

The Sallees chronicled their journey on a blog, which they updated nearly every day.

Kacie stayed in the hospital the day of her treatment and also the next day, because her back and head would hurt, Marinda said. After that, they explored area restaurants and markets.

Kacie bought dolls, which she named after her favorite translators - April, Wendy and Amanda, she said. She also bought a jade bracelet and a tea set. The family learned to bargain for items with vendors by using a calculator, her mother said.

While in China, Kacie also looked forward to eating shrimp sandwiches at KFC, a menu item not offered locally, she said.

"I just wish I could see a picture of a shrimp sandwich at KFC," Kacie said, describing in detail how the sandwich was made.

The Sallees are grateful they could make the trip, Marinda Sallee said, adding the stem cells Kacie received will grow for one year. Oxygen treatment may help if they stop noticing improvements, she said. If Kacie keeps improving, they may consider going back to China for more treatments, she said.

While Kacie's eyesight improvement may be slow, Marinda Sallee plans to post any news on Kacie's Web site at [www.kacieshope4vision.com](http://www.kacieshope4vision.com). Their China journey can be read at <http://stemcellschina.com/blog/kacie>.

"There may be weeks you will not have change, and then you notice something different," Marinda Sallee said. "We can't wait to see what tomorrow's is."

## Spinal Cord Injuries (SCI)

### Disabled Teen Still Showing

### Progress After Stem Cell

### Treatment

By Jeremy Duda

March 23, 2008

JUST LAST WEEK, TORI was able to complete an exercise her parents and therapists have been working on for a year -- she was able to blow a whistle. It may seem like a small indicator of progress to most people, but to someone in Tori's condition it was a tremendous leap.

"I started hearing this whistle ... and I thought it was my boy Brendan playing with a whistle. I was going to go tell him to be quiet, and then I went in there and it was her, so blow all you want," Tim said.

Tori, now 17, suffered a debilitating brain injury in 2005 after a car wreck left her underwater for an extended period of time. The anoxic brain injury left her unable to talk, feed herself, use the bathroom or move around freely.

In January 2007, Tori's parents took her to the Beike Clinic, where she underwent a month of treatment that included injections of more than 50 million stem cells. Stem cells have the potential to turn into different cell types in the body, and theoretically can divide without limit as long as the person is alive, acting as a "as a sort of repair system for the body," according to the National Institutes of Health's Web site.

Tim said Tori is also showing progress in other ways. Since returning from Hangzhou, she has shown an increased ability to chew and swallow soft foods on her own. Extensive physical therapy has increased the range of motion in her elbows and knees. And she is improving at the recognition exercises her therapists conduct using flash cards and computer programs.



*More than a year after she received stem cell treatment in China, Tori Schmanski is still showing signs of improvement. Tim and Maria Schmanski aren't sure how much of their daughter's progress is due to that trip to the Beike Clinic in Hangzhou, China, but they believe it helped. Progress may be slow, but Tori is still making new strides all the time.*

Tori still recognizes her friends when they come to visit. And at a recent dance recital at Timpanogos High School, where her old dance team was performing, she was quickly able to pick her friends out of a crowd of dozens of strangers.

At that dance recital, Tim took a photograph of Tori smiling. With limited use and control of her

facial muscles, smiles don't come often. But lately they have been coming more frequently, and Tim hopes this is a sign of more to come.

"It would be nice to have more of those smiles. She's trying," he said.

Tim and Maria are hoping for even greater improvements in the long term. Tim looks forward to the day when Tori can eat by herself instead of using a feeding tube, and would like her to be able to form at least simple words, so she can tell people when she needs something.

"Right now, Maria and I, we pretty much have to read her a lot of ways. She'll holler if she's uncomfortable or needs the channel changed, things like that," Tim said. "We would like her to tell us that she wants the channel changed."

Another trip abroad for stem cell treatment -- it is not easily available in the United States -- is still a possibility, though Tim said he's waiting before making any commitments. New advances and breakthroughs in stem cell treatment are being made every day, he said, and he's waiting to see where those advances go.

New clinics are also opening across the globe, Tim said, primarily in countries such as China, India and Ukraine that have fewer restrictions than the U.S. on the controversial treatment methods. Stem cell tourism is becoming a booming business for those countries. Some companies, such as Medical Tourism China Inc., even specialize in arranging travel packages for those seeking stem cell treatment abroad.

Tim and Maria would like to see the kind of treatment offered at the Beike Clinic become more readily available in the U.S.

In the U.S. now, research on human embryonic stem cell lines may only receive federal funding under specific circumstances, outlined by President George Bush in 2001: "removal of cells from the embryo must have been initiated before August 9, 2001, when the president outlined this policy; and the embryo from which the stem cell line was derived must no longer have had the possibility of developing further as a human being. The embryo must have been created for reproductive purposes but no longer be needed for them. Informed consent must have been obtained from the parent(s) for the donation of the embryo, and no financial inducements for donation are allowed," according to the NIH.

Tim said he met Sen. Orrin Hatch, R-Utah, at a dinner before Christmas, and after thanking him for his attempts to push a bill through Congress that would provide federal funding for stem cell treatment, they both expressed their hope that the bill would be passed soon.

Hatch called on President George Bush in 2007 to sign the Stem Cell Research Enhancement Act, but the president vetoed the bill. He vetoed a similar bill in 2005.

Proponents of the research say embryonic stem cells -- which can turn into cells for many different kinds of human tissue -- offer the best chance of treating or curing many fatal and debilitating diseases, according to The Associated Press. But opponents, such as Bush, argue that research on the cells, which can be derived from human embryos created during in-vitro fertilization treatments, effectively destroys a human life.

"He told me they're going to get it next year. They were so close [last] year," Tim said of Hatch. "I just know it's going to pass next year."



## Ricky Turner Gets Adult Stem Cells in China, Sees Marked Improvement in Paralysis

August 22, 2008

Doctors said Turner would be paralyzed from the neck down for the rest of his life. But now, two years later, Turner is moving in ways he could not before. And as KLTV 7's LaKecia Shockley shows us, it's all thanks to adult stem cell research.



*You can call it a remarkable comeback for a former east Texas police lieutenant. In August of 2006, a car accident paralyzed Henderson Lieutenant Ricky Turner.*

"They said I would never be able to control my torso, that's not there," says Ricky Turner as he bends forward. "...and, it's there."

To see Ricky Turner bend and move his limbs is simply amazing.

"I can now feel touch on my arm. It used to be that I couldn't feel someone touch me here or there. Now I can."

Doctors told Ricky he would never move from his neck down, but after spending a month in China he's doing the impossible.

"I'm probably about 25 to 30 percent stronger than I was. I used to be able to lift about two pounds now I'm up to about 40 pounds," said Lt. Turner.



At the Hang Zhou Hospital, Turner's medical team injected adult stem cells into his spine. Turner says without the treatment, he couldn't move the way he does now.



"The best thing about it is I don't feel any pain in my back bone...Most of my nurses were God

fearing Christian people and they'd come in [and say], 'Ricky let me pray for you!.'

Although Ricky's trip to China helped improve his strength, Ricky's determination and faith helped, too.

"A big part of it is the stem cell, a big part of it is the therapy and exercising everyday but the most important part of it is faith in God," Lt. Turner told us.

Ricky also said the Chinese doctors have offered for Ricky to come back to China for another treatment - and this one may help him stand!



# Standard Democrat

1-800-471-6980

## Cole Returns From China

By Leonna Heuring

November 30, 2006

SIKESTON — After returning a week ago today from China, where he received stem cell treatments, Terry Cole is wasting no time working to gain movement.

He's already able to move his toes.

"Jan. 4 will be 32 years," Cole said about recalling the last time he's felt any movement in his feet since he was paralyzed after suffering a spinal cord injury in a car accident.

Cole's occupational therapist Brooke Reed of Ozark Therapy in Sikeston said all of Cole's toes have movement, and he has hip flexor movement.

"He didn't have any of that before his stem cell treatments," Reed said.

Cole and his wife, Cindy, traveled to Shenzhen, China, which is near Hong Kong, where he was the subject of a study involving a procedure using umbilical cord blood stem cells, which are harvested from umbilical cord blood after a baby is born.

When the Coles arrived in China on Oct. 30, Cole underwent several tests before he received any of his stem cell treatments.

"They do a lot of tests on you when you get there and right before you leave," Cole said. "They keep very good records and take video of any improvements."

Throughout his stay, Cole took four injections of about 10 million stem cells each and one IV into the spinal cord fluid.

"They drew fluid out of my spine and then inserted the same amount of stem cells," Cole said.

Each stem cell procedure took only 15 to 20 minutes, but following each procedure, Cole was required to lie flat for four hours and then on his side for three hours. And he couldn't eat or drink for those first four hours.



*Terry Cole of Sikeston works on core muscle strength during a therapy session with Brooke Reed.*

"I saw the stem cells. They look like a bag of red plasma except for it's yellow," Cole recalled.

Cole also endured five to six hours of therapy each day. It consisted of a mix of physical therapy, occupational therapy, speech therapy, acupuncture, manipulation, activities of daily life education and Chinese massage.

“The Chinese are really working on it,” Cole said about their endeavors to treat spinal cord injuries through stem cells.

Cole said the two-year-old hospital he was treated at will eventually specialize in treating only spinal cord injuries.

In addition to receiving treatment, Cole said it took some time getting used to living in another country.

“The first couple of days were a culture shock, but then we enjoyed it,” Cole said.

One of the biggest differences from America was the public restrooms, which consisted of ceramic-tiled holes in the floor.

Although he did try a Chinese delicacy of camel, Cole said he and his wife mostly stuck to meals from Kentucky Fried Chicken, McDonald’s and Papa John’s Pizza.

“It was different,” Cole said. “It was a communistic country, but it was very modern in a lot of ways but backward in a way.”

Cole even learned to say thank you and hello in Chinese.

Cole met patients from all over the world — Rome, Australia, Canada. Cole even met a St. Louis woman who knew someone from Sikeston.

“All of the foreigners stayed on the same floor. We got to be like a family,” Cole said.

The doctors in China sent information about Cole’s treatment, test results, etc. to his therapists in Sikeston.

Reed said she was pleased with the treatment Cole received while in China. “Some of his therapy was nontraditional — and I wish we could utilize it more here,” Cole’s occupational therapist said.

Monday was Cole’s first day back to therapy after returning from China. “We’re working on the active motion he’s gained and on weight bearing. This will help with him standing and kneeling on all fours,” Reed said.

Reed said her plan is to push Cole to the maximum level so he can gain more movement and hopefully stand without a standing frame.

“Once he starts to progress, if it’s easy, then we’ll move up to the next level,” Reed said.

Of course, Cole couldn’t have done any of this without the support of his wife.

“She was by my side the whole time. I’m glad she went with me,” Cole said. Cole’s doctor in China recommended Cole return in three to six months for more stem cell treatment.

“We’re making reservations to go back in May for more treatments, but we haven’t made up our minds yet if we’re going to go,” Cole said.

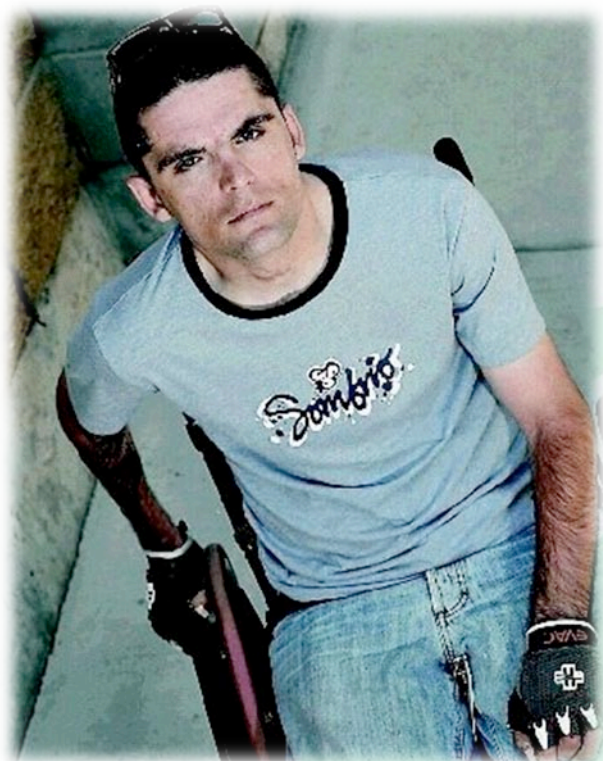
Cole and his wife are waiting to see how he progresses. So far Cole is very pleased with his results.

“I’d recommend it to anybody if they wanted it,” Cole said.

# THE VANCOUVER SUN

## Stem-Cell Treatment May Help Man

### Walk Again



*One evening this March, at a military hospital in northeast China, paraplegic Jason McCue moved his legs.*

June 30, 2007

One evening this March, at a military hospital in northeast China, paraplegic Jason McCue moved his legs.

It happened when the 31-year-old Calgarian was watching a movie with his girlfriend and her cousin, the three of them lying on two beds they had pushed together in his little hospital room.

The movement was just a slight shift, from left to right.

McCue, who hadn't even felt a sensation in his legs since he broke his back in a mountain biking accident nearly three years earlier, concentrated.

And then he moved them again.

His girlfriend, Kristie Hall, grabbed her video camera.

This could be the breakthrough they had been hoping for: the beginning of the end of his paralysis.

"I was freaking out," says Hall. "It was awesome. It was overwhelming."

The couple had made a long journey for this moment, raising thousands of dollars and travelling to Shenyang, China for a controversial stem cell treatment that they believe could help McCue walk again.

Such overseas therapies -- based on the promise of emerging stem cell science -- are becoming increasingly popular with North Americans. Patients say the \$20,000 US treatments offer hope for spinal cord injuries and other conditions that, so far, western medicine has failed to provide.

"We see improvements in many, many patients," says Dr. Sean Hu, co-founder of Beike Biotech, a China-based company that offers the procedure.

But North American experts are critical of the burgeoning number of stem cell therapies for sale in China, arguing they provide no benefit and even place patients at risk of infection.

While physicians in Canada say stem cells offer the promise of eventual treatments for conditions like spinal cord injury, they argue

research into the cells has not yet advanced to that point.

"I'm very supportive of research in this area, but the way a lot of companies in China are doing it is completely unacceptable to me," says Dr. Armin Curt, chair of spinal cord rehabilitation research at ICORD, a University of B.C.-based research institute.

"They play with the patient without having sufficient and robust pre-clinical data. They're playing and promising."

McCue is well aware of the concerns voiced by critics.

He stopped listening to doctors in Canada some time ago. The soft-spoken former athlete has grown tired of hearing that there was nothing more they could do for him, that he will spend the rest of his life in a wheelchair.

He's putting his faith in a group of microscopic cells that are said to be potent healers, no matter what the skeptics think.

"I believe in their system. I think there will be significant results," he says.

For McCue, the road to Beike Biotech's hospital in China began on a mountain trail in British Columbia on June 27, 2004.

He was warming up for a downhill biking competition at Panorama mountain near Invermere, when he pulled up his front wheel, slid down a make-shift ramp and was propelled off his bike.

McCue was a fearless athlete who counted rock climbing, snowboarding and competitive mountain biking among his favourite sports. He

had wiped out on his bike more times than he could remember.

But this time, he wouldn't walk away.

The fall knocked McCue out cold. When he regained consciousness, his concerned friends were hovering over the young man with spiky black hair.

"I asked one of the guys, 'are my legs touching the ground?'" he remembers.

"I couldn't feel them. I knew I was in serious trouble."

The hours and days after the accident were a blur. Paramedics carried him off the mountain on the back of a truck. He was transported by air ambulance to Foothills Hospital in Calgary where physicians rushed him into surgery.

His parents flew out from New Brunswick, his home province, to be by his side.

At some point, in a haze of drugs and pain, McCue learned that he had crushed his sixth vertebrae -- a spinal cord injury that would leave him confined to a wheelchair.

With only partial use of his hands, medical staff told McCue that he would likely have to use an electric wheelchair.

His life was forever changed.

For five months after the accident, he lived at Foothills hospital where he underwent intensive physiotherapy.

McCue had been living in Jasper, working as a land surveyor and doing his sports on the side, but his injury forced him to start over with a new career as a web designer. He moved to

Calgary where he would have better access to medical care.

He had to re-learn daily routines -- how to eat, how to get dressed -- all over again.

"It's very emotional, dealing with the loss of my freedom," says McCue.

The young athlete did defy the odds, learning how to use a manual wheelchair in spite of the injury to his hands.

When his physiotherapy was over, however, doctors and nurses at the hospital didn't give him a lot of hope for further recovery. There is no cure or treatment that can help paralysed patients walk again, they explained.

"It was heartwrenching," says Hall, his girlfriend. "They said 'this is where you are and that's all you are going to get.'"

Then, a year and a half ago, a friend gave McCue a Men's Health magazine with an article about patients who were travelling to Chinese hospitals for stem cell treatments.

He started doing more research, reading blogs from patients who underwent the procedure at Beike Biotech's facilities in China. Many patients reported benefits like better circulation in their lower body.

And some have had startling results, like moving their legs again.

McCue knew he had to go to China.

"I don't have anything to lose," he says.

Beike bills itself as a biotechnology company that offers "tomorrow's treatments today."

The Chinese firm is one of several around the world offering therapies based on stem cells -- cells that scientists believe hold enormous potential to treat a long list of ailments, including spinal cord injury.

Prized for their ability to develop into many different kinds of cells in the body, scientists hope that one day they will coax the cells into rebuilding damaged structures, possibly improving movement in paralysed patients.

Stem cell researchers, including the University of Calgary's Dr. Sam Weiss, say scientists have been conducting such experiments on animals, but the research is still in its early stages.

"They are within a year or two of being comprehensively tested in people," says Weiss, director of the university's Hotchkiss Brain Institute.

In spite of warnings that stem cell science is not yet ready to provide treatments, patients are willing to travel long distances -- and pay significant sums -- to undergo the therapies.

Beike Biotech officials estimate they have treated 300 clients from 40 countries since they began seeing foreign patients two years ago.

At least 20 have come from Canada.

And the firm, which has treated about 1,000 patients since 2001, has ambitious expansion plans to meet the ballooning demand for its therapies.

Beike hopes to open locations in Thailand and Romania.

Dr. Sean Hu, a Beike co-founder, says there are no immediate plans to set up shop in North

America, where he says it's difficult to obtain the necessary approvals.

Beike says it can help people with a variety of neurological problems: Parkinson's, cerebral palsy and multiple sclerosis to name a few.



## General News



### Charlotte Sun

#### [Doctor Plans Trip Overseas To See](#)

#### [Stem Cell Treatments](#)

By JASON WITZ

December 21, 2008

A local doctor hopes to travel overseas to get a closer look at medical advances with umbilical stem cell research.

Ophthalmologist Dr. David Klein has been invited to China as part of a fact-finding mission at one of the top facilities in the world.

Klein realizes good medicine doesn't end at the U.S. border.

However, there's a stigma associated with procedures still foreign to this country.

"A lot of Americans assume if it's being done overseas, they're experimenting on human beings," Klein said. "I'm going into it with an open mind."

The trip tentatively is set for early 2009.

Klein currently treats several patients who have undergone stem cell infusion in China. He became interested in learning more after seeing the progress of Cameron Petersen, the 2-year-old Port Charlotte toddler who underwent treatment last year.

Cameron suffers from optic nerve hypoplasia, a leading cause of blindness in children. The condition causes underdevelopment of the optic nerve and can lead to permanent blindness.

American doctors told Cameron's parents nothing could be done.

The family researched other options and found Stem Cells China, a research facility that has infused umbilical cord stem cells into patients with varying disabilities.

Cameron traveled overseas in August 2007 as part of a case study to treat his blindness.

The procedure consisted of four stem-cell infusions to Cameron's arm and the lumbar region of his spine.

By the third treatment, Cameron was standing on his own and crawling toward objects -- simple tasks he couldn't do before. Now, family members say he can see at least 10 feet, and is attending school.

"Cameron has made huge improvements," said Carol Petersen, the boy's grandmother. "There was nothing for Cameron before this treatment. Now, his world is limitless."

At this point, Klein is "cautiously optimistic" about the effectiveness of umbilical stem cells.

"I want to make sure there's good science behind it," he said.



**9<sup>th</sup> Floor, Zhongke Building, No.1 Hi-Tech South Street  
South Area, Shenzhen Hi-Tech Industrial Park  
Shenzhen, Guangdong, China 518057**

www.beikebiotech.com Tel: +86 0532-6677-6679 Fax: +86 0532-8577-9113

Ver. 1.4.2