Cord Blood **•** May Repair Hearing Loss

Hearing loss due to cochlear damage may be repaired by transplanting cord blood stem cells according to new research from Italy published in the journal Cell Transplantation. The work shows that a small number of cells can migrate to the damaged cochlea and repair sensory hair cells and neurons.

For their study, the research team used animal models in which permanent hearing loss had been induced by intense noise, chemical toxicity or both. Cochlear regeneration was only observed in animal groups that received cord blood stem cell transplants. Researchers used sensitive tracing methods to determine if the transplanted cells were capable of migrating to the cochlea and evaluated whether the cells could contribute to regenerating neurons and sensory tissue in the cochlea.

Results also showed that cochlear regeneration was less in the transplanted group deafened by noise rather than chemicals, implying that damage was more severe when induced by noise. Regenerative effects were greater

in mice injected with a higher number of cord blood stem cells. They also found that regeneration of cochlear tissues improved as time passed.

'This study provides hope for a potential treatment for the repair of hearing impairments, particularly

those arising as a consequence of cochlear damage," said David Eve, PhD, at the University of South Florida Health, and associate editor of Cell Transplantation.

Maia's a Little reasure

Cord blood banking has been in the spotlight once again with a three page feature in the lune/luly edition of Little Treasures magazine.

The story focuses on Maia Friedlander's treatment using her own cord blood for a brain injury sustained at birth and the amazing progress she has made and continues to make on a daily basis.

Maia's father, Daniel, talks about the changes in his daughter

following her treatment and how saving her cord blood led to a new beginning for the whole family.



We have teamed up with popular website www.ohbaby.co.nz to offer new registrations, including siblings, a range of fabulous promotions. This month, families registering before 20 June 2009, have been automatically entered into a draw to win \$1,000 worth of gift vouchers towards their cord blood banking and storage.

There'll be a variety of promotions throughout the year so if you're thinking about registering or you know someone who is, now's the time!

0800 CORDBANK (0800 267 322) www.cordbank.co.nz



Sound

JUNE/JULY 2009

Cord Blood To Help Repair Children's Heart Defects

Cord blood may provide the raw material to repair the hearts of thousands of babies born each year with defective heart valves, according to data presented at the recent American Heart Association annual meeting.

Cardiologists from the University Hospital of Munich report they are about five years away from transplanting new heart valves into children with heart defects, made from the children's own cord blood.

Congenital heart defects are the most common type of major birth defect. While surgeons can transplant new valves from donors or from artificial material, those valves won't grow as the children do, meaning those children will require repeated operations to provide them with new, larger valves.

Replacement heart valves made from the child's own cord blood stem cells would theoretically grow with the child and change shape as needed, significantly reducing the number of surgeries necessary for these patients.

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Gift Vouchers Now Available!

A CordBank gift voucher is the perfect way for you to help protect the future health of your friend's and family's newborn babies.

Ideal for grandparents or friends looking for the ultimate baby shower gift, a CordBank gift voucher lasts a lifetime and will be appreciated for much longer than a pram or baby clothes.

2,500

CordBank

cord blood banking gift certificate

Megan and Faul

'the gift that lasts a lifetime'

Grandma 3 Grandpa

Available from \$50 to \$5,000, gift voucher terms and conditions are available at www.cordbank.co.nz

"Why we banked our son's cord blood"

Congratulations to our March promotion winners - Kylie and Tristan Dean and their beautiful new addition to the family, baby Boston. They entered the 'register by 31 March' draw and won the full \$5,000 worth of registration, processing and storage:

We banked Boston's cord blood because we wanted to do everything possible to ensure Boston's good health in the future.

We found the whole process with CordBank incredibly efficient and everyone we dealt with was very helpful and friendly. The kit arrived and our only concern was if we forgot to take it to the hospital with us (which luckily we didn't!). Apart from remembering to take the kit to the hospital, and talking to our midwife about it, we didn't have to do anything!

For parents trying to decide about using CordBank, we'd suggest they do their



Boston Dean

Expat New Zealanders choose to bank in NZ

When Danielle, now living in Singapore with her family, was due to deliver her second baby she was certain of one thing - she wanted her baby's cord blood stored with CordBank in New Zealand.

With the support of our efficient, international couriers, the process was seamless - here's what the family had to say:

"Once again thank you so much for all your help, your organisational skills made everything incredibly easy on the day - and we really appreciate it!"

If you have friends or family living abroad that are looking into cord blood banking, ask them to get in touch. It's easier than you might think to have it stored here with us in New Zealand! own research - there's a lot of information out there. However, at the end of the day, I think the short term pain of parting with some cash is outweighed by knowing you've done everything possible to ensure the health of your child in the future.

> We were really excited about winning the competition and the money that we got refunded is going towards a family holiday in Fiji later this year, which we are really looking forward to. The whole process (including winning!) has been really positive and your customer service has been absolutely spot on.

Kylie and Tristan Dean

A brilliant video

To make it even easier for midwives and doctors in New Zealand to collect family's cord blood, we recently made the training available online. It's been a big hit here are some of the comments...

"A brilliant video. It is useful having the visual to reinforce the manual and to be able to watch again – very useful for reminders when it's been a while since taking a cord blood collection."

Nicola Miller-Clendon – midwife

"Perfect way to upskill. Thank you very much - it's a good resource to return to."

Robyn McDougal – midwife

"Excellent, practical way to arrange and ensure training." Hilary Ryan – midwife

"The online training is a great idea." Caroline Selwood - midwife

A very small price to

In an article published recently in the Sunday Star-Times, a New Zealand doctor questioned the likelihood of the use and value of cord blood banking. In response, the parents of the child successfully treated with her own cord blood for a neuroblastoma, wrote to the paper to express their concern at the inaccurate information published. The parents, who wished to retain their anonymity, had no family history of cancer and had banked their child's cord blood with CordBank.

The chances of needing a stem cell transplant is 1:400

Many of the doctor's comments have previously been refuted by the authors of an international study which concluded that the likelihood of needing a transplant using stem cells is 1:400.

One of the authors, Dr J.J. Nietfeld (Ph.D) Associate Professor at the University Medical Center Utrecht (Netherlands), called for

an update on opinions regarding the use of cord blood as comments made by the New Zealand doctor were based on out of date information. If you would like to read this letter, please go to:

http://hematopoiesis.info/wp-content/ uploads/2008/10/nrc2418-c1.pdf

Editor's Note:

Neuroblastoma comprises 6-10% of all childhood cancers, and 15% of cancer deaths in children. The annual mortality rate is 10 per million children in the 0- to 4-year-old age group, and 4 per million in the 4- to 9-year old age group.

To Whom It May Concern, We are the parents of the neuroblastoma child mentioned in your article. Neuroblastoma, a cancer that mostly affects children is usually treated with the patient's own cells and not that of others and this important issue was not addressed by your critic, Michael Sullivan. It is now about 18 months since our child was treated with her own cord cells and she appears to have made a miraculous recovery from a stage 4 cancer that nearly killed her. We are truly grateful that we entered into this scheme which is like an insurance policy that you hope never to have to call upon. At the very least it has given our family hope. The financial cost was a very small price to pay. Thanks.