

Vitality

WINTER 2010

WORLD LEADING CARE AT YOUR DOORSTEP

The best of care for
children and their families at

Austin Health's Paediatric Ward



Jack with his mother Heather.

Hospital can be an unfamiliar place filled with unfamiliar faces. For a child, hospital can be a very scary place. Austin Health's Paediatric Ward believes that family is central in helping a child be cared for and recover. Staff actively encourage parents to stay with their child to minimise stress, and to help in the care of their child.

The Paediatric Ward provides every type of general paediatric medical treatment and care for infants, children and adolescents. A 16-bed inpatient facility, Paediatrics also provides highly-specialised services and programs including the Children's Epilepsy Program, the Eating Disorders Program, the Chronic Fatigue Syndrome Program and Paediatric Endocrinology.

Seventeen year-old Jack, who lives in Alice Springs, was referred to Austin Health's Children's Epilepsy Program by a specialist they visited in Adelaide.

Jack's mother, Heather says, "Jack's seizures happen primarily at night – they come about when he's feeling tired or stressed. Last year was quite a stressful year for him – he was in the final year of high-school studying for exams. As a result, his seizures were getting worse."

Jack's epilepsy is difficult to control, requiring 24-hour supervision and three types of medication. **"We needed an answer. When we saw the specialist in Adelaide he referred us to Austin Health without hesitation."**

Earlier this year, Jack was admitted to our Children's Epilepsy Program. For two weeks, he was hooked up for video-EEG monitoring to record his brain activity. "Before we left home I contacted Austin Health to learn about the Epilepsy Program. I spoke with two wonderful Paediatric Liaison Nurses – Brialie and Karen. They gave me all the information, guidance and support I needed!" Heather said.

What was meant to be a one week stay for Jack and Heather became two weeks.

As Heather explains, "So the staff could best monitor him, they changed his sleeping patterns. They would get him to stay up at night and sleep during the day. That way if he had a seizure, they could not only electronically monitor him, but also personally observe him."

"During the first week Jack had no seizures. I guess he was very comfortable, relaxed and knew he was in good hands."

Professor Ingrid Scheffer, explains, "Patients, like Jack, come into the Ward usually for one week but occasionally stay for two, depending on how they and their family are coping and whether

we capture seizures. Electrical leads are attached to the child's head to measure their brainwave activity. Patients are also filmed via video so we can see what happens to them during seizures and we look at how the video correlates with the abnormal electrical brainwave activity during a seizure."

Professor Scheffer goes on to further explain that a parent (or carer) needs to stay with their child 24 hours a day. As soon as a seizure begins the parent pushes a button to alert staff. The staff inject neurolite – a radioactive material intravenously during the seizure. The child then has a SPECT scan which shows the blood flow to the brain at that moment in time and highlights the area of the brain from which the seizure has originated from. These tests together with MRI and other investigations help staff understand the type of seizure the child has to determine the best possible management.

Being able to stay with Jack was very important for Heather. "It made the world of difference when I knew I could stay right by his side. And Jack also felt relaxed knowing I was not far away."

The Paediatric Ward needs your help to purchase much needed additional equipment

"The staff do their best with the equipment they have, and especially for children it's so very important to have those extra items to deliver the best quality care. I want to know that other parents will receive not just the best medical care, because that is guaranteed with the team at Austin, but that the staff have the very best medical equipment", says Heather.

You can give to Austin Health's Children's Appeal today. Simply fill in the coupon attached to this newsletter, or call the Fundraising Department on 03 9496 5753 and show your support.

A message from the CEO

Our Vitality newsletter is an opportunity to update you on some of the activities and projects at Austin Health.

I am very proud of the care we provide for our patients and, as you will read in this newsletter, some of our expert staff has recently been officially recognised for their work; winning prestigious awards and grants. It's a nice acknowledgment of the innovative health care and research undertaken at Austin Health each year.

I want to thank our supporters who completed the Supporter Survey. Your feedback was very important to us and will help guide our choice of stories for future Vitality newsletters.

I thank you for your continued support as one of the team helping Austin Health to deliver the very best of care for our patients.

*Dr Brendan Murphy
Chief Executive Officer*



Hear about significant research at Austin Health

Want to know more about research developments on epilepsy, eating disorders and much more?

Go online and listen to our experts on podcast at

www.austin.org.au/podcasts

New eye test to detect heart attacks

A new eye test being developed by Austin Hospital cardiologist, Dr Ali Al-Faidh, could reveal those at risk of heart problems in six painless minutes. A flickering light and a close look into the eyes of a patient may be enough to avert fatal heart attacks and strokes or blood clots and avoid the need for surgery.

In the new test, a flickering light is shone into a patient's eyes as the high-tech 'dynamic vessel-analyser' camera records the reaction of blood vessels

at the back of the eye. **Austin Health has the only machine of its kind in Australia.**

Pupil dilation indicates good health; those whose pupils do not dilate are showing symptoms of a hardening of blood vessels that can indicate a serious risk of heart attack or other cardiac disease.

"We can prevent the disease rather than manage the disease after it happens," Dr Al-Fiadh said.

Similar studies have used still pictures of the eye to provide an insight to a person's risk of stroke or kidney failure. But the Austin study is the first time moving footage of the eye has been used to provide a more thorough glimpse into the heart.

A trial will test 250 patients with a history of heart problems; with plans to extend the study to 1000 people in three years to see if heart problems in the general community can be predicted.

Swine Flu - discovery

Austin Health researchers have made a potentially important discovery with international implications, identifying a blood protein deficiency that may be associated with severe H1N1 infection (swine flu).

The discovery could be significant for pregnant women and could lead to the development of new treatments for people with severe swine flu.

The discovery occurred when the infectious diseases team at the Austin Hospital was managing a severely ill 22-year-old pregnant woman in the Intensive Care Unit.

The team ordered a rarely used test of the patient's blood [immunoglobulin subtypes] to determine "spotter" proteins that tag invaders for the immune system to hunt and destroy. The test results showed that the patient had extremely low levels of one particular sub-class, called IgG².

IgG² is a protein that fights both flu and chest infections. It is crucial in the body's effective response to vaccines. Between 3 and 20 per cent of the population has naturally low levels of IgG², and the levels drop in pregnant women. Often unnoticed, this deficiency creates a chink in the body's immune system, which swine flu appears to be particularly good at exploiting.

Twenty-nine year old medical registrar, Dr Claire Gordon ordered similar tests for other hospital patients with swine flu and a pattern was confirmed that the sicker they were, the lower their IgG² levels were. To the team's relief, the patient started to recover soon after being injected with the protein. Subsequently the protein was used for other patients and Intensive Care Units around the world were advised of the development.

This was the first time [IgG²] deficiency has been linked to the swine flu severity.



Dr Claire Gordon pictured with Professor Lindsay Grayson.

The hospital's head of infectious diseases, Professor Lindsay Grayson, said it was early days and it was hard to be sure about precise cause and effect.

The team's next steps will be to determine if an IgG² injection is a genuine "cure" for swine flu. They will also examine whether there is a particular relationship between swine flu and the IgG² protein - or whether it has wider implications for treating other influenza types.

Did you know? Fewer than one in five people have naturally low IgG² levels, making them more likely to contract recurrent ear and chest infections. Pregnant women also experience temporarily low IgG² levels.

Research News

Grant for epilepsy cure:

A leading epilepsy researcher at the Austin Hospital has received a multi-million-dollar grant to uncover the genetic causes of the condition.

The Director of the Comprehensive Epilepsy Program and Melbourne University's Epilepsy Research Centre at Austin Health, Professor Sam Berkovic and his team were awarded a major \$16.5 million grant this year from the National Health and Medical Research Council.

The professor's team of neurologists, molecular geneticists, physiologists and brain imaging specialists are widely regarded as world leaders in the discovery of the genetic causes of epilepsy.

Prof Berkovic said, "We're trying to understand the fundamental basis of epilepsy, what genes do, and how they impact on the structure and function of the brain to cause seizures."

Did You Know when children have a long stay they don't miss out on school?

The Paediatrics Ward has a School Room purposely set up to ensure that every child who stays at hospital for four days or more does not miss out on any class time or homework. The School Room is overseen by a fully-qualified teacher, who also assists children with their work.

Emergency medicine research awarded:

Austin Health's Director of Emergency and General Medicine Research, Associate Professor David Taylor was presented two top awards by the Australasian College for Emergency Medicine at its annual scientific meeting this year.

A/Prof Taylor received the 'John Gilroy Potts Award', for research published in the British Medical Journal that showed how a particular spray (vapocoolant) reduced the pain of inserting intravenous lines.

He then received the Best Research Paper Award for his presentation on adverse events related to 'procedural sedation'. The research allowed his team to identify risk factors that lead particular patients to have airway problems when they were sedated.

A/Prof David Taylor's research spans a wide variety of issues. He has published over 150 research articles on research, which has improved patient management and length of stay. Current research topics range from the best drugs to give extremely agitated patients, through to dog bites in children.

Did You Know how the Ketogenic Diet helps?

Austin Health's Children's Epilepsy Program teaches parents and children the benefits of the Ketogenic Diet. It is a medically supervised diet that may be a treatment option for some people with epilepsy. It involves a high fat and very low carbohydrate and protein diet that makes the body burn fat rather than carbohydrate and protein for energy. **This diet can only be given under medical supervision.*

Surgery Centre Campaign – reporting back



Day Surgery Centre Registered Nurse 2, Tina French demonstrates a Nonin Monitor

We would really like to thank all who donated to our fundraising appeal for The Surgery Centre, Austin Health's elective surgery unit. Due to your generous support, more patient equipment has been purchased for the unit.

Eight Nonin Monitors at \$3,250 each, which are used to take a patient's blood pressure, pulse rate and blood oxygen levels, and eight Cardinal IV Pumps at - \$2,500 each have been purchased for the Centre. We have also purchased some much needed wheelchairs - All thanks to your support!

The Day Surgery's Inpatient Clinical Manager, Michelle Wood, and Associate Nurse Unit Managers Prue Smith and Karen Cook, said the new equipment had come at a great time. "We have just had our busiest month of operations ever at the Centre, treating 646 patients in March. This level of activity is expected to continue as the demand for elective surgery within the community continues to rise," said Michelle.

"We are also treating more complex patients who are requiring more complicated medical procedures, for example; breast cancer surgery," Karen said. "We will now have more IV pumps for the post surgery patients.

"We would really like to thank everyone for helping us. Your support is really fantastic, and will make a huge impact on both the staff and the patients." added Prue. "Thank you!"

Royal Talbot – Winners at the 2010 Melbourne International Flower and Garden Show



Talbot Garden recognised at the 2010 MIFG Show.

Congratulations to Steven Wells and his team for being awarded the 'Silver Show Garden' at this year's Melbourne International Flower and Garden Show.

A strong belief in the healing power of gardens inspired Steven Wells to build a health and wellbeing garden for the Melbourne International Flower and Garden Show.

Mr Wells runs horticultural therapy sessions at Royal Talbot Rehabilitation Centre as well as working as a nurse in the Acquired Brain Injury Unit. He described the show as "the horticultural event of the year". The show is the largest of its kind in the Southern Hemisphere and attracts Australia's top landscape gardeners.

"Gardens play an important role in our health, whether we are working or relaxing within them, or using them to connect with family and friends. In healthcare settings, in the form of horticultural therapy, gardening can improve mobility, dexterity and planning skills, and also improve confidence and social skills," Mr Wells said.

He built the garden with help from a number of staff volunteers, sponsorship from beyondblue garden suppliers and fellow garden designer, Melissa Thomas of Natural Inspirations.

The feature of the garden is a 'geo-dome', which is positioned on a series of circular pads, which provides visitors to the garden with a quiet refuge. This is surrounded by plants that have been chosen

because of their calming effect, blending colours and textures.

Now that the MIFG Show has concluded, the entire garden will be relocated – geo-dome included – to the space in front of Mellor Ward at the Royal Talbot Rehabilitation Centre.

Nurse Unit Manager of Mellor Ward, Julie Zagorski, said "It will be fantastic when it gets here. Some of our patients can't get over to the sensory garden, but now they'll be able to get the same benefit here."

It's therapeutic for the patients, and they will be able to go into the dome for some peace and quiet from what is otherwise a very busy day," she said.

Fundraising Department has Moved

The Fundraising Department, along with the Volunteer Services Manager have moved to the Ground Floor of the South Wing at the Heidelberg Repatriation Hospital.

The move has created a centralised focal point for our supporters and volunteers. We have attached a map for you, so please feel free to come by and introduce yourself or say hello between 9am-5pm weekdays. Fundraising's main reception phone number remains the same 03 9496 5753 and fax 03 9496 5160. We look forward to seeing you at our new home!



Do you have a story to share?

Have you been a patient or a carer of a patient who has been treated at Austin Health and would like to share your story with our Vitality newsletter readers? Please write a few short sentences about your story, along with your contact details, and post it to "Fundraising Newsletter Editor, Austin Health Fundraising Department, Locked Bag 25, Heidelberg Victoria 3084" or email: fundraising@austin.org.au

The editor will contact you for more information and final approval of the story, that will be featured in Vitality. Thank you.

