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UPDATE

2010 has gone quickly for BrizBrain & Spine and we are anticipating another busy year ahead! We would like to thank our referrers for their support in 2010 and we are looking forward to working with you again 2011.

Fortus Health has recently began offering a neurological rehabilitation service for patients with a neurological

condition. Our physiotherapist, Andrea Giebel, can assist in management of stroke; dizziness, balance and vestibular disorders; acquired brain injury; Cerebral Palsy; Parkinson's Disease; Multiple Sclerosis; and Peripheral Neuropathy.

We are constantly seeking to improve our services to patients and referrers, so if you have any feedback please don't hesitate to contact the practice on 3833 2500.

SPINAL CASE STUDY

A 45-year old cabinet maker presented to his GP with pain radiating to the medial aspect of the right calf as well as groin and buttock pain for two months. He had bent over whilst holding a nail gun and noticed sharp pain in his back. The next day he had difficulty getting up and sought the help of a chiropractor over the next six weeks. When his pains persisted, he visited his GP.

Examination revealed some loss of pin prick sensation in the medial calf. The invertors of the foot were weak but mildly so. Straight leg raising was painful and limited to about 45 degrees.

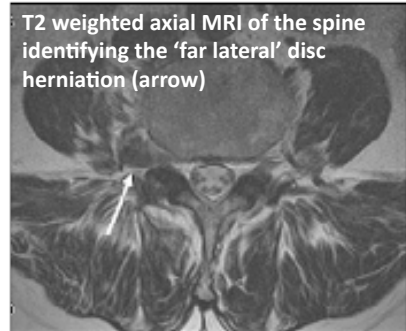
A CT scan of the lumbar spine was reported as normal. The GP commenced panadeine forte and amitriptyline.

Another month passed, the pains had not resolved and the patient was noticing his leg 'collapsing out' from under him. A referral was made for neurosurgical review.

At review, pains persisted in the right anterior thigh and medial calf. There was dysaesthesia and objective reduction in sensory discrimination in a classic L4 dermatomal distribution. The CT scan had not been brought along for review, but the radiology report was

unremarkable.

On the strength of the symptoms, a right L4 nerve root block was ordered along with an MRI (see picture). The nerve root block helped the symptoms significantly over 4-5 days, but when the pains returned the patient was taken to theatre for L4/5 far-lateral discectomy, which resolved his symptoms.



This large disc herniation at L4/5 was not noted on the initial CT scan, by the radiologist, but was clearly evident on the MRI. The so called 'far lateral' disc herniation should always be considered along with the much more common postero-lateral herniation in the differential diagnosis of femoralgia and sciatica. MRI scan is a much more sensitive investigation. These herniations compress the nerves after they have exited the spinal canal, but can be just as problematic or even more-so, given the close proximity to the dorsal root ganglion.

HISTORY OF NEUROSURGERY - LOBOTOMY

The Lobotomy was first discovered in 1890 by German Scientist, Friederich Golz, who noted that animals were much calmer after the removal of their temporal lobe.

Soon after, the Lobotomy was used on four patients at a Swiss mental hospital by Gottlieb Burkhardt as treatment for mental conditions.

The Lobotomy became a regular treatment for mental diseases as prescribed by Egas Moniz. Moniz, alongside Almeida Lima, performed the first frontal Lobotomy on a patient in 1935. He believed that sinister thoughts stimulated the

neurons and created depression and mental health issues, and that any alteration to the frontal lobes would interrupt this negative cycle. Between 1939-1951, more than 18,000 lobotomies were performed in the United States.

This method was widely abused to control unwelcome behaviour, rather than act as a last resort procedure. Nowadays, anti-psychotic and anti-depressive drugs provide a more manageable approach to treat these conditions.

Milestones in Neurosurgery 2002, the Parthenon Publishing Group Inc. Pearl Hill, New York.

MALIGNANT BRAIN TUMOURS

One of the most common problems we see in Neurosurgery is that of malignant brain tumours, specifically malignant gliomas. The most aggressive of these, Glioblastoma Muliforme (GBM) is also the most common. Unfortunately GBM is an incurable disease. New treatments are being devised and we are developing novel immune therapies but these potentially curative treatments may be a long while off for patients. In the meantime, we should be maximising the current available treatments, rather than admitting total defeat.

Our philosophy when dealing with GBM is to be aggressive in treatment. That does not mean exposing patients to additional risk, but we believe that if we can help to extend people's lives, whilst it may not be curative, then it is worthwhile. Standard treatment for GBM is surgery, followed by oral chemotherapy and radiotherapy. With this form of treatment, the median

overall survival is 14.6 months.

Our approach has been to aggressively resect tumours, and at the same time insert local BCNU (chemotherapy) wafers into the tumour cavity. The patient then goes on to oral chemotherapy and radiotherapy. This approach, "quadruple therapy" has been used in only a handful of centres in North America and Europe, and we are the only neurosurgeons in Australasia doing it.

Using this approach, our results show the average survival of our patients to be 17.6 months, similar to results from other centres overseas. This difference between our results and standard therapy – 17.6 vs 14.6 months – may not seem much, but for patients it certainly is. When the quality of life is maintained and there is no increased risk, we believe Quadruple therapy should be offered whenever possible.

These results were recently presented by Dr David Walker at the Annual Scientific Meeting of the Neurosurgical Society of Australasia with International neurosurgeons in attendance.

DID YOU KNOW?

The human brain accounts for only two percent of your body weight, but 20 percent of the blood that flows from the heart is sent to nourish it (page 208)

Your brain uses 10 times more oxygen than all of the other parts of your body combined (page 224)

¹ Juan, Dr Stephen. (2000). *The Odd Body and Brain*. Sydney: Harper Collins Publishers.

GREY MATTERS QUIZ

1. What is the classification system for lumbar slips?
A) Montreal
B) Meyerding
C) Manchester
D) Monster



2. What is the grade of the illustrated L5-S1 slip?
A) 3
B) 33
C) 2
D) 7

Please email Kate McBain with the two correct answers to katem@brizbrain.com.au by close of business 28 January 2011. All correct entries will go into a draw to win a \$50 Coles Myer voucher. The winner will be notified by 31 January 2011.

NEWSLETTER SUBSCRIPTION

To ensure that you always receive your quarterly copy of Grey/ Hope Matters, please visit www.brizbrain.com.au and follow the prompts to subscribe.

Hospitals:

The Wesley Hospital, Auchenflower
St Andrew's Hospital, Spring Hill
Holy Spirit Northside Hospital, Chermside

Regional Clinics:

St Vincent's Medical Centre, Toowoomba
Sunshine Coast Private Hospital, Buderim
Tweed Day Surgery, Tweed Heads
Mater Private Hospital, Rockhampton

SURGICAL OUTCOMES SURVEY

The Surgical Outcomes Survey (SOS) initiative by BrizBrain & Spine Research Foundation is an internet-based program that standardises reporting outcomes of spinal surgery.

The SOS program allows patients to assess their physiological response to spinal surgery.

The program is an Australian-first, giving patients standardised self-assessment and reporting tools and also allowing the collation of meaningful pre- and post-operative data from spinal surgeons.

The combined data is a major step forward in facilitating spinal research across the nation.

DONORS

The BrizBrain & Spine Research Foundation would like to acknowledge our sponsors; Orphan Australia, Medtronic and Schering-Plough.

Their contribution enables us to continue our research and improve the treatment and post-operative care of patients, so they can return to a normal life as quickly as possible.

MAKING SENSE OF BRAIN TUMOUR

This research is a combined project between Griffith University, the Queensland Cancer Council and BrizBrain & Spine Research Foundation. Making Sense of Brain Tumour is still in the early trial stages and only began in May 2010.

The aim of this project is to develop and evaluate a counselling and rehabilitation program for supporting adjustments to brain tumour.

This is obviously a difficult time for patients and the trial will be designed according to the goals and support needs of each individual person and family.

Examples of the support given by the neuropsychologists from Griffith University to brain tumour patients and families are:

- Education about the brain and effects of the brain tumour on brain function

- Individual, couple and family adjustment counselling
- Rehabilitation strategies for managing changes in cognition and behaviour

Our role in this research is to find patients who may be appropriate to participate in this project, contact them and if they are interested, send an information brochure to them with details of the project coordinator.

This trial enables BrizBrain & Spine Research Foundation to better assist our patients and provide them with the mental and physical support needed.

This research project will be conducted over the next three years.

For more information about this research trial, please contact Vivien Biggs on 07 3833 2500.

UPCOMING EVENTS

BrizBrain & Spine Research Foundation is planning lots of exciting events to be held in 2011. Watch this space for more details on future fundraisers!

Please contact Shelly Shaw on 07 3833 2500 or shellys@brizbrain.com.au for more information.

DONATE

As a not-for-profit charity, the BrizBrain & Spine Research Foundation relies entirely on the generosity of donations.

If you would like to make a contribution to our charity, you can do so by calling Shelly Shaw on 3833 2500 or visiting our website (www.bbsresearch.com.au) and following the prompts to donate.



VIV'S QUARTERLY COLUMN

On the 21 July 2010, I graduated from QUT with my Masters in Nursing Science (Nurse Practitioner). The journey back to university took three years and was a challenge in balancing family, work and study, but was well worth it. I have now officially been accredited as a Neuro-Oncology Nurse Practitioner.

Nurse Practitioner roles are new to Australia and have been created to assist in filling gaps in the health service for particular patient populations. The role we are developing here at BrizBrain & Spine will build upon our current Brain Tumour Coordinator role and will further assist in meeting the needs of our brain tumour patients and their families.

The role will provide extra responsibilities of assessment and diagnostics and referrals. All of these responsibilities and the role itself will be conducted in collaboration with our neurosurgeons.

I would like to take this opportunity to thank all the team at BrizBrain & Spine for their continued support of this role and most importantly to all my patients who have taught and continue to teach me the most important lessons not only for my work, but in life.

FUNDRAISING UPDATE

The second half of 2010 was very busy for the BrizBrain & Spine Research Foundation (BBSRF). We would like to officially welcome Beth Morrison, our new Data/Research Assistant, and Shelly Shaw, Fundraising Coordinator, who both joined the BrizBrain & Spine Research Foundation team recently.

Recent BBSRF fundraising has been highly successful with the Day for Danielle fundraiser and BrizBrain Tumour Awareness Walk taking place on 11 September and 31 October respectively.

Day for Danielle raised just over \$20,000 and was held in memory of Danielle Lynch, a BrizBrain & Spine patient who sadly lost her battle with a brain tumour at age 19 earlier in 2010.

Almost 300 people attended the event at Springfield Lakes to celebrate and commemorate the life of Danielle. The fundraiser, in association with Westside Community Care's Run for Life, consisted of a 1km walk, raffles and entertainment, with all funds raised going to BBSRF.

We would like to thank the Lynch family for their assistance in organising the event, as well as the following sponsors who generously contributed to the fundraiser, especially Visy and the Pratt Foundation who donated a combined \$5,000.

- The Coffee Club Springfield
- Judy Latham Real Estate
- Jarvis
- Ray White Springfield

- Lakeside Medical
- Orion Family Physiotherapy
- Visy
- Interchange Consultancy Group
- IGA Springfield
- Civic Video Springfield
- Your Local Quality Butcher Springfield
- Flight Centre Springfield

The BrizBrain Tumour Awareness Walk launched International Brain Tumour Awareness Week in New Farm Park on Sunday 31 October. Over 100 people dressed in orange caps walked 4km through New Farm.

The walk was followed by sausage sizzle, giving walkers a well-deserved chance to re-fuel and socialise with fellow participants who had all been touched in some way by various brain conditions.

We would like to acknowledge and thank our volunteers Dave and Theresa, as well as our sponsors, Coles New Farm, Waterloo Hotel and Moo Moo the Wine Bar and Grill. We raised almost \$7,000 for the day which is a fantastic result.

We would also like to thank everyone who has attended our recent fundraisers.



Dr David Walker being presented with a \$5,000 cheque from Visy at Day for Danielle

