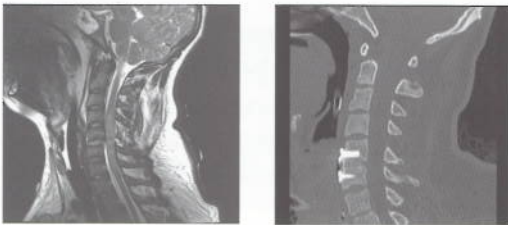


Clinical spinal cord injury case

Michael Bryant (MBBS, FRACS) – Neurosurgeon BrizBrain & Spine



This case examines a 20-year old male who was the front seat passenger in a car, travelling at roughly 160km/hr when it lost control, resulting in a C6 tetraplegia (ASIA A). Shoulder abduction remained, but elbow flexion, whilst present, was weak.



The mid-sagittal, T2 weighted MRI showed disruption of the C5/6 disc and posterior elements. There was a hyperintense signal within the cord itself, reflected in the patient's clinical condition.

Respiratory failure ensued and the patient was intubated and ventilated and cared for in the intensive care unit.

The next day, I took the patient to the operating theatre, and a C5/6 anterior cervical discectomy and fusion was undertaken. The disrupted disc was removed and a tri-cortical, iliac crest bone graft was harvested and sited in its place. A plate and screws completed the fixation.

A surgical tracheostomy was performed 10 days post injury. Percutaneous feeding was established at six weeks post injury. Ultimately the patient remained in the intensive care for 196 days with repeated respiratory complications.

Ventilator independence was however ultimately achieved, and he was cared for in the spinal unit of the hospital pending wheelchair modifications to his home. No neurological recovery was achieved.

Approximately 18,000 men, women and children in Australia live with paralysis caused by spinal injury.

Spinal cord injury occurs at a rate of one major injury in Australia every day. Over half of all spinal cord injuries occur as a result of motor vehicle accidents. Surprisingly perhaps, a quarter of injuries occur during every day accidents, including falls off ladders, simple slip and fall, work place accidents etc. The average age of spinal cord injury sufferers is 33 years, but the peak incidence occurs at the age of 19.

Research into spinal cord injury is ongoing and a large amount of money and effort has been put into attempts to regenerate injured spinal cord. Scientists at the University of California have reported that regeneration of central nervous system axons can be achieved in rats even when treatment is delayed more than a year after the original spinal cord injury. However, much more work needs to be done on the procedure before we can give patients this option.

Michael Bryant

Special Interests: Spinal Surgery, Neuro-oncology
Consults at Chermside and operates at HSN.

For all appointments please phone: 3833 2500

Stronger together with Fortus Health

BrizBrain & Spine has recently opened Fortus Health, a physiotherapy and rehabilitation service based at Chermside. Fortus Health boasts highly experienced physiotherapists and innovative services, including early recovery programs, hands-on physiotherapy, exercise prescription and spinal muscle activity scans.

Their coordinated team approach means that Fortus Health draws on the collective wisdom of the BrizBrain & Spine surgeons, whom are actively involved in program development, reviewing and shaping the direction of patient rehabilitation and treatment conducted at Fortus Health.

Not only can patients with recent injuries benefit from Fortus Health care, but this pioneering company can also provide preventative measures for long-suffering patients.

The Fortus Health physiotherapists specialise in treating patients with back pain, neck pain, whiplash or other related musculoskeletal or neurological injuries.

Fortus Health are currently offering a specialised back pain program which provides patients with an individually tailored plan to suit their own back pain needs.

For further information about **Fortus Health** please phone 3833 2555 or visit www.fortushealth.com.au

