

## Thought Control

Support is growing for non-drug treatment of ADHD, writes **Laticia Gibson**.

Therapy that exercises the brain is producing the kind of results that only drugs were delivering for some people with attention deficit hyperactive disorder (ADHD).

Electroencephalograph biofeedback (or neurotherapy) trains the brain to harness its inherent ability to learn about itself and change permanently.

People with ADHD and learning disabilities often have sluggish brainwave activity and neurotherapy can increase a patient's ability to concentrate, learn and retain information.

Based on the works of Professor Barry Serman of the University of California, neurotherapy has also been used to treat patients with epilepsy, early onset dementia, depression and minor brain injury.

Jacques Duff, the Australian president-elect of the International Society of Neuronal Regulation, runs a centre in Melbourne that has treated more than 1000 people. He believes the treatment is so effective the need for medication can sometimes be eradicated.

"In the case of ADHD, within 20 sessions the effect is similar to Ritalin, with the effects being permanent", Duff says.

Numerous studies, including a report last year by Vincent J. Monastra of Birmingham University in Britain, show 40 sessions are far superior to Ritalin, with most patients permanently reducing and even stopping their medication about the 20th session.

Neurotherapy practices are spread across the world, from the United States to South-East Asia and the Middle East and, although simplified forms of neurotherapy have been used internationally since the late 1960's, Australians have been able to access the treatment for only about 10 years. Now, with more than 100 registered and trained clinicians practicing in Australia, Duff hopes the field will become more legitimized and accepted by the mainstream.

Neurotherapy sessions involve the trainee being hooked up to an electroencephalograph with sensors placed on each ear plus one or two on the scalp.

These detect the amplitude and frequency of brainwaves, which are categorized according to their speed.

Beta, the fastest of the group, deals with day-to-day information-processing activities that enable most people to make decisions and perform several tasks at once. The second-fastest have a lazy Sunday afternoon type of rhythm, when people are relaxed but still alert. The slowest two are commonly associated with deep relaxation or sleep.

People with ADHD and learning disabilities are less able to produce beta activity and have increased levels of the slow, theta, brainwaves.

Duff says neurotherapy essentially reverses this by "making the person aware of what is happening to their brainwaves and training the brain directly into changing those patterns towards normal". Trainees are asked to control the height of two bars on a monitor. Each bar represents a type of brainwave, usually theta and beta. The beginning phases require two to three sessions a week.

"Once they start doing really well on an independent test of variables of attention [a computer administered task] we start tapering sessions to one a week".

The initial process includes an analysis of diet. "We make sure the gut function and gut bacterial profile is normal because this can affect cognitive performance quite dramatically".

Guided sessions last between 30 and 40 minutes and, with committed attendance, training can be completed within four to six months with improvements generally seen from the 10th session onwards.

As the technique works on strengthening brainwaves, just about anyone can benefit from it, with students and athletes attending clinics. However, Duff warns that budding Einstein's will be disappointed.

"There is an optimum set-point for the brain. You can't, for example, keep making someone smarter. On average though, an IQ increase of 15 points is seen in children with ADHD and learning difficulties".

### After Years Of Frustration, Dramatic Change...

When Therese Head and her husband, Peter, started seeking answers for their son's behavioural problems in 2003, neither guessed it would be such a battle.

"It was very upsetting because I felt helpless rather than hopeless. I just didn't know where to go to get help", Therese says.

For Joshua, now nine, the journey was even harder. He was struggling to cope with school and his parents felt under pressure to accept the widely used Ritalin. In the three months Joshua took the medication, they were disturbed by the outcomes.

"He lost all of his appetite and when you looked into his eyes, his pupils were dilated", his mother says.

After years of misdiagnosis and trudging between countless GPs, neurologists and pediatricians, finally there were answers. Joshua was diagnosed with concussion syndrome, which was caused when he received a blow to the head racing his older brother. There was still the question of treatment.

Relief came nearly two years ago, when Therese's mother-in-law handed her an old newspaper article on neurotherapy. Now living in Avoca, the family has seen a change for the positive.

They bought a home program for \$2500, with Therese supervising sessions. Within three months of neurotherapy, their formerly angry, frustrated and misunderstood son blossomed. "He now knows about consequences and choices and can negotiate for himself".

Sibling rivalry is still rife with his 12-year-old brother, but Joshua now attends school five days a week; in 2003, he could barely manage two days.

Therese Head urges other parents to "keep searching for answers and forget the drugs".