

Neurotherapy



What is Neurotherapy?

Neurotherapy is an evidence based, well-researched, interactive and enjoyable brain training technique that helps your brain re-regulate itself into a more optimally functioning state. Neurotherapy looks at a person's brain waves taken from a recording called an EEG. EEG brain waves have been studied since 1924. Initially we used EEG to look at the waves for those that were abnormal – such as those signifying epilepsy. However, we can now look at the amount of any brain wave in any given area, not just what their form looks like.

The study of the amount of different brainwaves in the human brain shows that remarkably, in health, we are all much the same. However in illness, there are patterns that show either excesses or deficiencies of certain brainwaves in certain locations. We know this as there are "normative databases" which are taken from many recordings of people who are well with no symptoms of ADHD, depression, anxiety, epilepsy, etc. When someone is having a symptom that is troubling them, their EEG can be analysed to see how much of the different brain waves there are in areas known to be associated with those symptoms. This is termed a quantitative EEG or QEEG. We can then compare this

to the normative database and look at areas that differ and whether these correspond with the person's symptoms. When they do, we can actually train the brain waves through a process called biofeedback. This can strengthen frequencies in specific locations that are deficient causing problems. And likewise, we can train the brain to dampen down frequencies in specific locations that are running in excess. This process is termed Neurotherapy or Neurofeedback or brain training.

This field of work began around the 1960s and there are now thousands of research papers in the field and many people providing neurotherapy overseas.

Why haven't I heard of this before?

Neurotherapy does not fit well into our present models of medicine due to time constraints and costs. In a General Practice there is only a limited time available to see patients. Most forms of neurotherapy are time consuming - most sessions are an hour long.

Additionally, the neurotherapy set-up for clinicians involves many years of additional study to learn about the different frequencies in the different areas of the brain and how to read EEG. The equipment is very expensive and can be difficult to order and maintain overseas. However, those that practice neurotherapy usually do so as they have a passion for addressing problems at their baseline cause, effectively and permanently. So while Neurotherapy is not well known due to the above reasons, awareness is increasing with many people now becoming aware of its potential to resolve issues at their root source.

What Conditions Benefit from Neurotherapy?

Neurotherapy has helped numerous people with many different challenges. Here are just a few:

- ADD/ADHD
- Anxiety
- Autism
- Chronic Pain
- Depression
- Learning Disorders
- PTSD
- Sleeping Disorders
- Traumatic Brain Injury
- Seizure Disorders

How effective is Neurotherapy?

Neurotherapy has been shown to resolve 80% of ADHD. This finding has been published in meta-analyses – these are studies that combine many other studies and tend to be very robust. Neurotherapy is also very well validated for the treatment of epilepsy and alcoholism/addiction. If you are looking to find studies on the validity of Neurotherapy in these and other areas, these can be found at <https://www.isnr.org/isnr-comprehensive-bibliography>.

Benefits of Neurotherapy

A significant number of practitioners also use these approaches for “sub-clinical” populations who seek “peak performance” enhancements, citing detrimental issues such as “brain fog,” trouble with energy, and lack of focus. Neurotherapy is helpful for many conditions in which the brain is not working as well as it could.

Many clients have reported the following benefits:

- Enhanced mental clarity and processing speed
- Improved focus and concentration for improved learning and memory
- Improved mental flexibility - able to shift more easily from one task to another
- Improved ability to self-regulate emotions, thinking, and behaviour
- Enhanced timing and self-regulation skills for peak performance in sports
- Improved resilience to stress

What is a Neurotherapy session like?

Our clinic offers several types of neurotherapy performed at our clinic including:

- LORETA
- "Standard Neurotherapy" (single and dual channel and surface)
- LENS

For the first two forms of Neurotherapy, the session is usually an hour and involves having either an electrode cap or single electrodes placed on the head. EEG gel is used to ensure good signal pick up and then the person trains – most often by watching a movie. They control the brightness and size of the movie with their brain waves! LENS sessions are shorter. Please see our LENS brochure regarding this specific modality.

More about Integrative Medicine

Here at the Brain Health and Biofeedback Clinic we offer you holistic care as we are an integrative medicine clinic. Integrative medicine consists of a combination of two approaches to health.

Firstly a functional view of health in which we look at your lifestyle. While we know that diet, sleep, stress management and exercise are all critical for health, many of these areas are difficult to cover in standard care as there often just isn't the time to address lifestyle factors. One solution would be referral to a nutritionist, a psychologist or mindfulness coach and a personal trainer to separately address these areas in a patient's life. Functional practices include a lifestyle assessment and plan.

At the Brain Health and Biofeedback Clinic we provide the latest technology in stress management assessment including capnometry, galvanic skin response and heart rate variability assessments. Personalised diet, sleep and exercise support is provided.

Added to this is a systems-based approach in which we look to understand the root cause of diseases or symptoms. The person is a whole and in a functional medicine framework, we treat the person rather than the disease. The latest advances in medical science are supporting a move towards personalized medicine. New technological developments allow us for the first time to offer individualized testing if indicated when no progress is being made with simpler approaches. Genomics (genetic testing), metabolomics (testing of individual biochemistry such as methylation capacity), autonomic assessments (the balance between the "fight and flight" and "rest and digest" systems which is often an issue in chronic disease), and microbiome studies (to identify imbalances in gut organisms which impact our health) are all now possible. Combining this with a person's envirome (their environment

including lifestyle) allows for the ability to look across systems to determine an underlying cause behind an individual person's presentation.

Integrative Medicine has gained popularity. Here at the clinic we believe that personalized medicine is without a doubt the future model of medical care.

Your Practitioner



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The Brain Health and Biofeedback Clinic is here to partner with you on your wellness journey. We do this by offering a range of innovative technology, diagnostic tools, and a holistic view to those who are looking to address the root cause of their problem and supplement their experience within the traditional health structure. We are more than a clinic; we are a community who are here to empower you to reach your complete and full human potential, in wellness, happiness and health.

