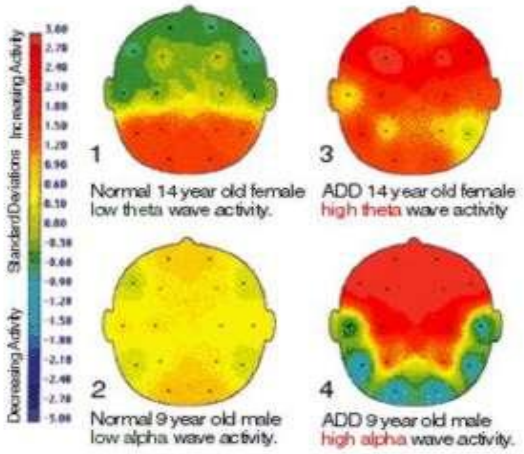
Neurofeedback

The Learning Assessment and Neurocare Centre have collaborated with PeakMind to provide a Neurofeedback service here in our clinic.

Typically, research has found that individuals with AD/HD have an excess amount of slow-wave activity, theta waves, in the front part of the brain, which makes it difficult for them to maintain concentration.



Through neurofeedback training, individuals are taught to decrease the amount of slow wave activity and increase other brain waves enabling them to sustain attention.

Some professionals have been skeptical about this treatment. However, there is now a wealth of clinical evidence showing that it is an effective treatment for AD/HD (Arns et al., 2009). Monastra (2001, 2005) found that over an average of 43 neurofeedback sessions, 75% of patients in the study had normalized brainwaves which were sustained for 3 years after the treatment. Therefore, their AD/HD symptoms were reduced in all aspects of their lives.

Every client who wishes to undergo neurofeedback training initially undergoes a quantitative EEG assessment (qEEG). The qEEG is a 19-lead assessment which assess' all areas of the brain and in particular detects which areas of the brain should be targeted for training. This assessment is then compared to a database containing data on healthy individuals. This will demonstrate which areas are functioning well and which are below the optimum performance.

During a neurofeedback session, an individual has a couple of EEG sensors on regions of the scalp that can detect brain activation involved in alertness and behaviour. When the individual produces the correct brain wave, they are rewarded by a visual movement or auditory sound, therefore reinforcing the behaviour. In other words, you are playing a game or watching a video by using your brain waves instead of your hands. As the patient has more training sessions, the brain has to work harder to get rewarded. On average, an individual would expect to have 40 sessions of neurofeedback treatment. A session is usually an hour long and occurs at least once a week.

When the neurofeedback sessions have been completed, another qEEG will take place. This will be compared to the original qEEG and will be able to show the progress that has been made during the training sessions.

Neurofeedback is a long-term strategy to improve the symptoms of AD/HD with benefits been shown to last for 3 years. It is not a quick fix solution as training can take a while to complete. However, it has been found that some patients have been able to reduce their medication or in some circumstances completely stop the use of medication after having neurofeedback.

If you would like to know more about our Neurofeedback service at LANC, please contact Dr. Neil Rutterford at PeakMind:
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Email: info@peakmind.co.uk

Some helpful websites:
www.peakmind.co.uk
www.brainclinics.com
www.theadhddoc.com

PeakMind

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