**Limbic Rage and Neurofeedback (nfb)**

**The limbic system is in the middle of the brain, it is responsible for laying down memories and activating the motor system, survival mode - fight / flight response. The primary sites for this are the amygdala and the hypocampus as well as the right orbitofrontal cortex which Alan Shore talks about (its in the files section on this site, Alan Shore and Attachment).**

**The right side of the brain is switched on at about 5 months of conception, so it is there at birth, recording and remembering - feelings, sensations, pain, pleasure, is life safe or is it not, for the next 2 years... most of this is the responsibility of the right amygdala and orbitofrontal cortex. The right amygdala and orbitofrontal cortex (the lower right front corner of the brain behind the eye so to speak) are severely affected by stress, rejection, chemicals, abandonment, neglect, trauma, etc. the stress hormones damage these brain structures so that they don't operate properly.**

**What happens is that the fight/flight response is damaged and therefore lights up every time something in their environment is not right. When the problem becomes too big for the family to handle and is happening at school, community etc. it is generally called, Reactive Attachment Disorder (RAD).**

**RAD can be internalized - teenagers self-harming, depression, drinking, avoidance... or it can be externalized - explosive violent behavior, impulsivity and hyperactivity combined with damage to property and others...typical narcissistic and anti-social personality behaviors.**

**In teenagers it is nasty and destroys families and friends, in infants it is what we commonly see on this forum. Damage to the limbic system can be mild or it can be severe, and it doesn't really go away by itself, that’s why there are so many specialties and services available.**

**Neurofeedback looks at the brain and how it is operating (we do an EEG assessment and a neurological assessment as well as symptom based questionnaires), this helps us determine which parts are running too fast or too slow. We then target certain sites and train those sites either up or down using a computer with either games or DVD movie as the feedback. It works unconsciously so it is fun, as training develops it gets easier as the behavior settles.**

**We train brainwaves, on the left side for ADD, inattention, dyslexia and depression we speed up the brainwaves. On the right side of the brain we slow them down, this is where RAD, PTSD, FAS, Aspergers, Tourettes, anxiety, impulsivity, hyperactivity, ADHD, bipolar, borderline.. the list is long. Anything that is running too fast is found on the right side of the brain, which has been recording life experiences since prebirth. It is a very complex part of the brain and takes time to work out exactly what site and what frequency need to be trained.**

**Therapy usually starts with an assessment, looking for brain sites that are over or under aroused. The first 10 or so sessions are usually trying sites and frequencies to find out what works best for that person. No two people are the same, that’s for sure!**

**For simple left sided problems (ADD inattentive type, depression, and some dyslexia), it can take 30-40 sessions to change the brainwave patterns to where they should be, clinical practice and research shows that once moved they generally stay in the new pattern. For RAD and other right sided disorders it takes much longer and it is usually a bumpy road until training effects kick in.**

**There are some people on this forum who home train, they bought the system and train under the supervision of a practitioner, that may be the best road for most people, but the more difficult disorders really need professional support.**