



Information taken from Dr. Daniel Amen/Amen Clinics

Temporal Lobes are involved with memory, understanding language, facial recognition, and temper control. When there are problems, especially in the left temporal lobe, people are more prone to temper flare-ups, rapid mood shifts, and memory and learning problems.

Functions

- Dominant Side (usually the left)
 - Understanding and processing language
 - Intermediate-term memory
 - Long-term memory
 - Auditory learning
 - Retrieval of words
 - Complex memories
 - Visual and auditory processing
 - Emotional stability
 - Mood stability/Temper control
 - Process sounds and written words into meaningful information
- Nondominant Side (usually the right)
 - Reading & recognizing facial expressions
 - Social cues
 - Rhythm
 - Music
 - Visual learning
 - Spiritual experiences

Problems with the Dominant Side (usually the left)

- Aggression, internally or externally directed
- Dark or violent thoughts
- Sensitivity to slights, paranoia
- Word-finding problems
- Auditory processing problems
- Reading difficulties
- Emotional instability
- Dysfunction is often associated with paranoia and violence

Problems with the Nondominant (usually the right)

- Difficulty recognizing facial expressions
- Difficulty decoding vocal intonation
- Implicated in social-skills struggles
- Increased right lateral temporal lobe activity can cause hypervigilance regarding the intentions of others.

Problems with Either or Both

- Headaches or abdominal pain without a clear explanation
- Anxiety or fear for no particular reason
- Abnormal sensory perceptions, visual, or auditory distortions
- Feelings of déjà vu or jamais vu (not recognizing familiar places or people)
- Periods of spaciness or confusion
- Hypergraphia, excessive writing
- When the amygdala is damaged, patients can have dark, evil, awful thoughts.
- If the hippocampus is damaged, they may have learning or memory issues.
- The “what pathway” – temporal lobes name things

Conditions when temporal lobe function is underactive:

- Learning problems
- Memory problems
- Temporal lobe epilepsy
- Aggression/suicidal behavior
- Paranoia

Conditions when temporal lobe function is overactive:

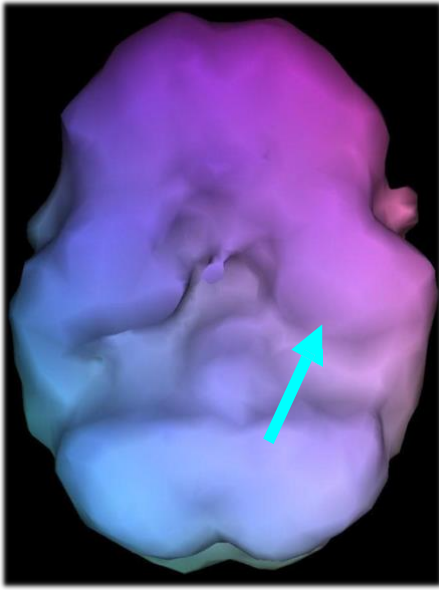
- Seizures
- Irritability
- Panic
- Mysticism and spiritual or religious experiences

“Prescriptions”

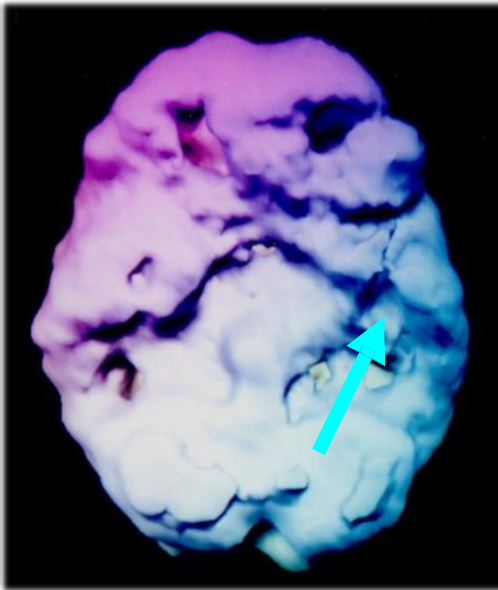
1. Create a library of wonderful experiences
 - series of experiences that keep you motivated, healthy, and excited for life; record with pictures, videos, journaling etc.
 - Reexperience them as often as you can
 - The most precious treasures we have in life are the images we store in the memory banks of our brains. The sum of these stored experiences is responsible for our sense of personal identity and our sense of connectedness to those around us.
 - They interpret what we hear and integrate it with stored memories to give meaning to the incoming information.
2. Sing whenever/wherever you can
 - song has long been known to have healing qualities
 - children can best learn through songs
 - Use humming and toning to tune up your brain (~5 mins. day)
 - using your voice to enhance mood/memory by singing, chanting, yodeling, humming, reciting poetry, or simply talking
 - relaxes, releases fear/emotions, physical pain; tinnitus; insomnia
3. Listen to Classical music

- listening to music in general can activate and stimulate the temporal lobes and bring peace/excitement to mind
 - Fast tempo, upbeat music can stimulate depressed patients in a positive way
 - Mozart's Sonata for 2 Pianos enhances visual-spatial learning skills
 - Mozart's music may "warm up" the brain for complex activities
 - Strengthens the creative right-brain processing center associated with spatial reasoning
4. Learn to play a musical instrument
 5. Move in rhythms
 6. Consider Supplements
 - Mood Stability
 - GABA, B6, fish oil
 - Memory
 - Blood flow-ginkgo, vinpocetine
 - Acetylcholine-acetyl-l-carnitine, huperzine A
 - Antioxidant-NAC
 - Blood sugar-alpha lipoic acid
 7. Common Medications
 - Mood Stability
 - Anti-epileptic meds
 - Neurontin
 - Lyrica
 - Lamictal
 - Depakote
 - Dilantin
 - Memory
 - ACEI
 - a. Aricept, Exelon
 - Namenda
 8. Get enough sleep
 9. Eliminate caffeine and nicotine
 10. Watch your nutrition
 - Ketogenic diet /fish oil
 11. Neurofeedback

Healthy TL



Damaged TL



Anger, Marital Problems



Before Treatment



After Treatment