REVISITING A NEUROFEEDBACK CLIENT 2009 AND 2018
Case presentation by Kristie Kirby, Ph.D.
Developmental History

- Full-term, vaginal delivery, she has a sister who is her fraternal twin
- Three older brothers who are triplets
- Motor, language, and social development were normal
- Emotional development - smart, outgoing, cooperative
- No trauma history
- Grew-up in Ontario in the same house with family intact
- Mother had undiagnosed temporal lobe seizures (due to being a forceps delivery) and was known “to do funny things” like put the milk in the cupboard and the dirty dishes in the refrigerator
2009 Symptoms attributed to loss of estrogen

- Night sweats
- Hot flashes - up to 12 per night
- Difficulty maintaining sleep
- Distractability
- Word finding problems
- Difficulty remembering names

- Difficulty shifting tasks
- Poor sustained attention
- Short-term memory impairment
- Lack of appetite
- Joint Pain
Medications in 2009

- Arimidex 1 mg estrogen blocker
- Mobic 15 mg for joint pain and inflammation
- Levothyroxin synthetic thyroid - on it for 6 years
2009 Symptoms attributed to chemobrain

- Distractability
- Difficulty thinking clearly
- Sense of confusion - leading to panic attacks
- Impaired sense of direction - getting lost driving to familiar places
- Unable to multi-task so everything takes longer to complete
- Feels disorganized - not herself
- Slowed thinking
- Fatigue
- Irritable
- Feels mentally foggy
- Sensitive to loud noises
- Can not remember conversations or follow TV shows
Neurofeedback Treatment in 2009

• T3 - T4
• T4 - P4
• T3 - Fp1
• Frequency between 0.005 and 0.001 Hz
• 18 sessions across 3 months
Outcome in 2009

- She does not go on disability leave
- Hot flashes dropped from multiple per night to one per night
- Sleep greatly improved
- Memory improved
- No more word finding problems
- Less distractible
- Able to sustain attention
- Does not get lost when driving
- Has more energy
- Husband reports that she is no longer irritable
- EMPATHY has returned
2018 Symptoms

- Anxiety, irritability, and impatience
- Fatigue
- Difficulty maintaining sleep
- Poor sleep overall
- Difficulty remembering names
- Poor concentration

- Poor sustained attention
- Difficulty shifting attention
- Difficulty thinking clearly
- Distractible
- Poor short term memory
- Poor verbal expression
- Word finding problems
Changes in Personal History

• On no medications
• Cured of cancer
• Two concussions in the past 10 years
• Came in on crutches - broke her ankle while playing ice hockey
• Marriage of 30 years is stable
• Both sons are in their 20’s, are independent, and have successful careers
2018 - 2019 Treatment

• Starting placement: T4 - P4 and T3 - T4
  • for anxiety and sleep, frequency: 0.01 mHz
• Session 5: added T4 - Fp2
  • for concentration and executive functions
• Session 7: complains of problems sleeping after sessions
  • stopped T4 - Fp2 and trained T4 - P4, T4 - O2, and T3 - T4 for calming
• Sessions 10 to 17: added T4 - Fp2 back in for executive functions
2018 - 2019 Treatment

• Sessions 1 to 4:
  • T4 - P4
  • T3 - T4
• Sessions 5 and 6
  • T4 - P4
  • T3 - T4
  • T4 - Fp2

• Sessions 7 to 9:
  • T4 - P4
  • T4 - O2
  • T3 - T4
• Sessions 10 to 17
  • T4 - Fp2
  • T4 - P4
  • T4 - O2
  • T3 - T4
2018 - 2019 Treatment

• Sessions 18 to 27:
  • T3 - Fp1
  • T4 - Fp2
  • T4 - P4
  • T3 - T4

• Sessions 28 to 33 changed to new Protocol:
  • T4 - Fpz for 15 minutes
  • T3 - Fz
  • T3 - P3 for 15 minutes
  • T4 - P4
Outcome - Reported Changes

• Sleep has improved - now having vivid dreams
• Attention and learning - decreased distractibility, improved memory, improved word finding, and reports that she is more articulate and feels organized
• Emotional - improved on all counts, decreased anxiety, irritability, and impatience; sense of humor has returned
• Physical - more energetic and job stresses do not upset her
• Miscellaneous - unable to tolerate wine
Symptom Tracking Report: 2018 - 2019
2018 - 2019 Treatment

• Sessions 18 to 27:
  • T3 - Fp1
  • T4 - Fp2
  • T4 - P4
  • T3 - T4

• Sessions 28 to 33 changed to new Protocol:
  • T4 - Fpz for 15 minutes
  • T3 - Fz
  • T3 - P3 for 15 minutes
  • T4 - P4
Outcome with New Protocol: Dynamic Stabilization

• Seems to have a synergistic effect
  • the whole is greater than the individual parts
• She can calm her mind quickly
• Able to see the Big Picture and sum up its importance
• Seems to enhance a “flash of insight” in some clients
Age: 64 Female

- **PRESENTING CONCERNS IN 2009**
  - Medically induced menopause
  - Chemobrain
  - Disability leave being considered
- **PRESENTING CONCERNS IN 2018**
  - General complaints about memory impairment
  - Not handling stress well
  - History of two concussions
 Treatment History and Medications

• Outpatient psychotherapy
  • Was seen for 6 weeks in couple’s counseling
  • Was seen for 4 years in individual therapy
• First marriage ended while she was in medical school
• Second marriage has lasted for 30 years and is stable
• Two sons who are now young adults
• MEDICATION - 2009