

Introduction

A case study of a 54 year old female from Iran will be used to illustrate how neurofeedback can enhance the outcomes of psychotherapy. We will describe changes in the client's symptoms following a course of psychotherapy in comparison to the outcomes achieved after neurofeedback was introduced later in the treatment. We also aim to raise the awareness to the complexity of this clientele group, who are not only impacted by their history of torture and trauma, but face immense stress throughout their resettlement period. The value of neurofeedback when treating clients with such complex issues will be discussed.

Background

Trauma history:

- Grew up in a strict Muslim family- DV was prominent
- Sister committed suicide when client was aged 23 yrs old
- political involvement against the Shah (1970s) and Iraq-Iran war (1980s)
- Experiences of torture, displacement, loss of friends by murder
- Marriage and experiences of DV with husband- 25 years
- Resettlement challenges in Kuwait
- Severe depression and hospitalization for 6 months in Kuwait
- Resettlement challenges in Sydney, separation from two adult sons

Presentation/ Concerns

- Always well groomed
- Motivated for change
- Affect- expansive and stable
- Mood- low and anxious

Maintaining factors:

- a. separation from sons
- b. lack of social support
- c. financial difficulty
- d. resettlement challenges

Symptomology:

- Severe anxiety
- PTSD ie hyper arousal symptoms
- Complex grief issues
- Depression and fear of hospitalization
- Interpersonal issues ie conflict with others
- Negative view of self and the world around her
- Multiple physical health issues and chronic pain
- Sleep disturbances including nightmares

Protective factors:

- Personality- resilient, determined, future and goal oriented

Treatment

Psychotherapy:

- Grief and loss counselling
- Supportive counselling
- Referrals and advocacy with other services
- Cognitive Behavioural Therapy
- Mindfulness based symptom management techniques
- Trauma processing through Narrative Therapy
- Dialectical Behavioural Therapy ie Interpersonal Effectiveness, Emotional Regulation

Neurofeedback:

Temporal training:

- T3-T4 was used for headaches, emotional stabilization, central nervous system instability

Central training at the sensorimotor cortex:

- Cz-A2 was used to calm down the central nervous system, regulate emotion and fear response
- C3-C4 was used to stabilize the arousal level

Note: neurofeedback was used in conjunction to the psychotherapy modalities mentioned before.

Outcome

Multicasi- Pre Counselling:

HSC= 2.8
HTQ= 2.25

Multicasi- Pre Neurofeedback:

HSC= 2.8
HTQ= 2.68

Multicasi- Post Counselling:

HSC= 2.92
HTQ= 2.6
No. of sessions: 41 attended

Multicasi- Post Neurofeedback:

HSC=1.6
HTQ= 1.8
No. of sessions: 30 attended



Fig. 1 Brain waves

Conclusion

Neurofeedback in combination with psychotherapy was more effective for this client than psychotherapy alone.

Client is to continue neurofeedback training using Alpha-Theta training.