Post-Traumatic Stress Disorder

Chairperson: Dr. Abe Timmons

Tuesday, May 1st

2:20-3:10 pm

PTSD Treatment

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I have no conflicts of interest to report

Work Related Injuries Workshop
April 30th & May 1st, 2018

Treatment of PTSD

- 1° prevention – prevents vulnerable population being exposed to trauma
- 2° prevention – prevents or lessens symptoms development
  - 80% exposed had PTSD symptoms soon after Oklahoma City bombing, but <50% developed a psychiatric disorder
- 3° prevention – treats an established syndrome, to reduce symptoms, complications, or impact

Treatment of PTSD

Epidemiology

- Over half of the population exposed to Criterion A trauma
- Most develop some symptoms (e.g., FB, insomnia, numbing)
- Acute Stress Disorder (ASD) = ≥9 PTSD symptoms but < 1 mo.
- Most ASD resolves within several weeks of exposure
- PTSD in up to 1/3 of ASD cases
- 50% of PTSD resolves < 1 year
- 10-20% develop chronic and unremitting course
- PTSD prevalence = 6.8% in USA, 13-20% OEF/OIF/OND Veterans

Cole G et al. *Focus Psychiatry* 2013;11(3):307-314.

Treatment of PTSD

PTSD prevention is an urgent goal, because…

PTSD related to increased

- sleep problems
- severe health problems – esp. CV, GI, MS
- medical visits and hospitalizations
- surgeries
- work impairment
- suicidal thoughts (40.3%) and attempts (18.8%)

Treatment of PTSD

PTSD and Suicide – a complex relationship

Some types of PTSD clearly increase risk of attempt or suicide

Risk factors increasing odds ratio (AOR) for suicide attempt:

- PTSD Dx = 2.6 PTSD Sx severity = 1.7
- Negative beliefs = 1.6
- Childhood physical abuse = 2.9
- Alcohol problems = 2.9 (any substance problem = 2.6)
  Guina J et al. *Prim Care Companion CNS Disord* 2017; 19(26)
- Military sexual trauma (MST) = 1.69 (men) and 2.27 (women)
  Kimerling R et al. Am J Prev Med 2016; 50:684-691

Among those with PTSD, risk is increased by high levels of intrusive memories and trauma-related guilt.

Treatment of PTSD

2° Prevention: Psychological Debriefing, or CISD/CISM

- Given to exposed group, not by request
- Trauma-focused, detailed, required individual participation
- Psychoeducational component
- Was standard (military units, first responders, Israeli DF)
- Found not to prevent PTSD or lessen PTSD symptoms; was quite distressing to some.
  Forneris CA et al. Interventions to prevent PTSD. *Am J Preventive Med* 2013;44(6):635-650.
- Not recommended past initial years of last decade

Treatment of PTSD

2° Prevention: Other fond hopes

- mild or deep sedation
- chlorpromazine (Thorazine)
- “stress doses” of hydrocortisone (cortisol)
- propranolol
- opioids

Treatment of PTSD

2° Prevention: Psychological First Aid

- Accurate information about situation, emphasizing safety
- Help with practical issues, to re-establish normalcy
- Education about common reactions to trauma
  - Feeling anxious, sad, scared, or angry
  - Trouble concentrating or sleeping
  - Thinking continually about what happened
- Education about self-care
  - Engage in healthy behaviors & normal routines for meals, exercise, sleep
  - Spend time with loved ones and trusted friends who are supportive
  - Talk about it with people who care about you and will listen
  - Keep informed, but limit your exposure to news about the event

Treatment of PTSD

Psychological First Aid

- Offering specialized help – *If stressful thoughts & feelings continue and/or interfere with everyday life, seek more help*

  -worrying a lot or feeling very sad, anxious, or fearful

  -crying often

  -having trouble thinking clearly

  -having frightening thoughts or reliving the experience

  -feeling angry

  -having a lot of trouble with sleep or nightmares

  -avoiding places or people that evoke memories or responses

  -fatigue, sweating, palpitations, startling easily, GI pain or issues

Treatment of PTSD

Psychological First Aid – what is "specialized help?"

Brief trauma-focused Cognitive-Behavioral Therapy (CBT) is superior to supportive counseling Roberts NP et al. Early psychological interventions. *Cochrane Database of Systematic Reviews* 2010, Issue 3

-CBT did not demonstrate earlier return to work after disabling adjustment disorder

-Problem-solving therapy (PST) demonstrated 17 days earlier return to work v. no or usual treatment

Arends I et al. Interventions to facilitate return to work. *Cochrane Database of Systematic Reviews* 2012, Issue 12.

Treatment of PTSD

Workplace preparedness & response

- 2003 NIOSH review: workplaces must develop strategies for intervention before, during, and after trauma
- Pre-event: risk analysis, drills (preparedness :: outcome)
- Event: leadership visibility, organizational communication
- Post-event: restore organizational safety, cohesion, routine
- CISD not professionally recommended
- Psychol 1st Aid, Resilience Briefings are recommended

Fullterton CS et al(2003) Report to NIOSH. Uniformed Services Univ.

Treatment of PTSD

3° Prevention: Treating existing PTSD

Difficult, requires training on both sides

Medical model vs.

- Patient/client-centered care

  Harik J. Shared decision-making for PTSD. *PTSD Res Quarterly* 2018; 29(1):1-9.

- Motivational interviewing

Treatment of PTSD

Psychological Treatments of PTSD

- Trauma-focused psychotherapies: individual, 12 – 15 sessions
  -Cognitive Processing Therapy (CPT - CBT adapted for PTSD)
  -Prolonged Exposure (PE)

    Two-week "massed" version may be more effective (Foa EB et al. *JAMA* 2018;319(4))

    Written exposure therapy (5 session) v. CPT; 6% v. 40% drop-outs, non-inferior to CPT through 36 wk; 63/63 (both) at BL, WET 26/54, CPT 20/51 at 36 wk. (Sloan DM et al. *JAMA Psychiatry* Jan 17 2018)

    Four 30' sessions in PC beat usual care on symptom severity and PTSD dx (Cigrang JA et al. *Families Systems & Health* 2017; 35(4):450-462)

  -Eye Movement Desensitization and Reprocessing (EMDR)
- Non-trauma-focused (Present-Centered, Interpersonal, Stress Inoc.)
- Group therapies – efficient, but less effective than individual
- Traditional v. CVT

  -Telemedicine Outreach for PTSD (TOP): Delivered significantly more CPT, larger decreases in Posttraumatic Diagnostic Scale scores at 6 months than UC. Fortney et al. *JAMA Psychiatry* 2015:72(1):58-67

  -No difference in patient-rated satisfaction, quality. Gros DF et al. *J Telemed Telecare* 2018;24(1)

Treatment of PTSD

Psychopharmacological Treatments of PTSD

- Antidepressants: Standard of care (but not very effective) sertraline*, paroxetine*, fluoxetine, or venlafaxine
- Possibly more helpful than harmful – need more evidence:

  Other antidepressants?

  Some antipsychotics (quetiapine, aripiprazole, olanzapine)?

  Prazosin for trauma-related nightmares; doxazosin?

  Propranolol v. placebo before sessions of trauma recall?

  Brunet A et al. *Am J Psychiatry in Advance*, Jan. 2018
- Recommend <u>against</u> benzodiazepines**, risperidone, cannabis

*FDA approved

**except briefly, for insomnia

Treatment of PTSD

Repetitive Transcranial Magnetic Stimulation (rTMS)

- Good early evidence that rTMS is effective
- Not clear which stimulation regimen is optimal
- Not widely available
- Requires almost-daily treatments for weeks

Treatment of PTSD

Integrative Treatments of PTSD (adjunctive)

- Mindfulness – small effect size
- Yoga/meditation – 5 + Grade B studies
- Exercise – 150' of moderate-intensity – early + results
- Acupuncture – 2 + studies, Grade B support
- Hypnotherapy – 3 + studies – Grade B support
- Qigong, Tai Chi – very early + results
- Biofeedback – no consistent results
- Relaxation, Visualization, Natural products – too soon to tell

Wahbeh H et al. *Focus Psychiatry*, 16(1), 2018

Treatment of PTSD

Train Bosses – it matters!

Reducing work-related SL in a large fire & rescue service (AUS)

128 managers randomized to 4-hr MH training program or WL

Mean rate of work-related SL in next 6 mo. (% of duty time)

training:	BL – 1.56%	6 mo. – 1.28%	Change = -0.28%
WL:	BL – 0.95%	6 mo. – 1.23%	Change = +0.28%

Return on investment: £9.98 per £ spent on training

Milligan-Saville JS et al. Workplace MH training for managers. *Lancet Psychiatry* 2017;4:850-858.

Treatment of PTSD

Resources for the clinician

- VA/DOD Practice Guidelines for Treatment of ASD & PTSD

https://www.healthquality.va.gov/guidelines/MH/ptsd/VADoDPTSDCPGClinicianSummaryFinal.pdf

- VA PTSD National Center

https://www.ptsd.va.gov/professional/index.asp

- Accessing VA Resources

http://www.psychiatry-mps.org/veteran-resource

- PTSD Consultation Program (non-VA treaters of Veterans)

https://www.ptsd.va.gov/professional/consult/

Treatment of PTSD

Resources for the patient/client

NIMH: coping with traumatic events

https://www.nimh.nih.gov/health/topics/coping-with-traumatic-events/index.shtml

National Center for PTSD

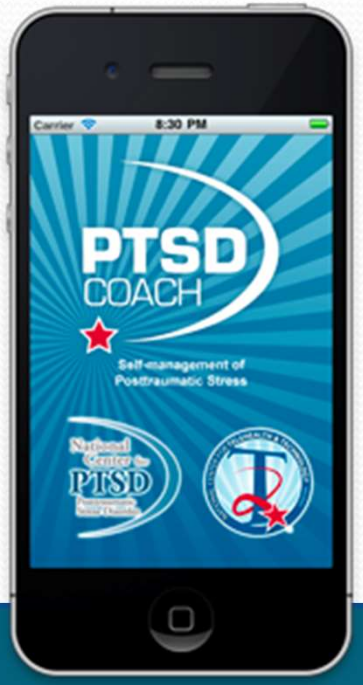
https://www.ptsd.va.gov/PTSD/public/treatment/cope/coping-traumatic-stress.asp

The National Lifeline

https://suicidepreventionlifeline.org

Mass. Psychiatric Society

http://www.psychiatry-mps.org/vhacer



Limbic-Based Therapies

Kenneth A Larsen, DMin, PhD
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Pro Sports Behavioral Medicine

NEW ENGLAND BAPTIST HOSPITAL

OFFICIAL HOSPITAL

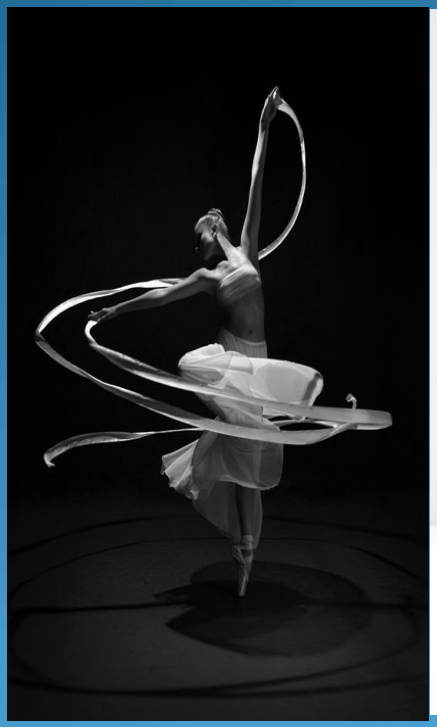
PRO SPORTS ORTHOPEDICS

Work Related Injuries Workshop
April 30th & May 1st, 2018

The Dynamic Balance of the Autonomic Nervous System

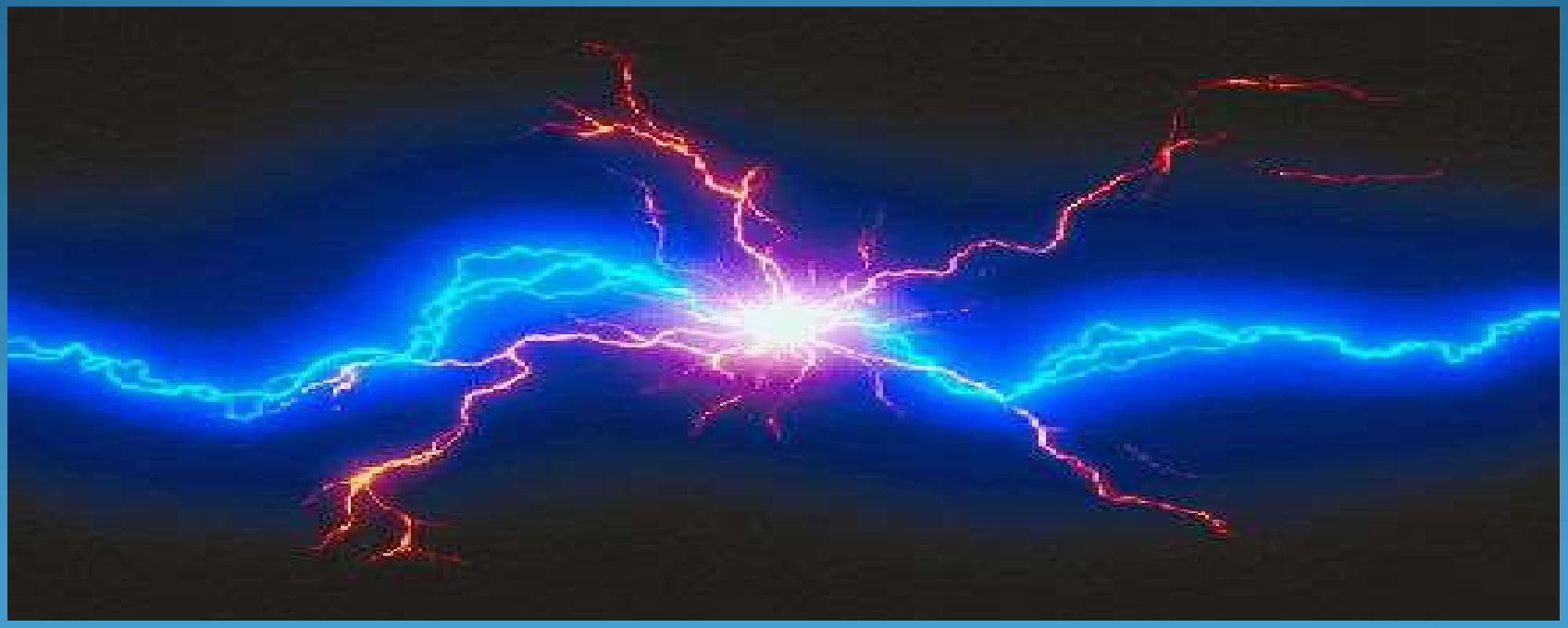
Dance – Flow – Oscillation - Rhythm

of pain, anxiety, control, release, trust, and peace in those who are suffering



Understanding Through The Lens of Trauma

1. ELECTRICAL > vagal connection between gut & limbic system
2. MECHANICAL > diaphragmatic breathing and its effect on lungs & brain
3. BIOCHEMICAL > role of serotonin; HPA axis; and Trauma Chemistry
4. IMAGINATION > focusing on best outcome instructs the body to heal



Bio Chemical Effects of Trauma on the Brain and how that effects the management of pain

CORTISOL

Blocks the integrative memory function of the hippocampus

It can become Neurotoxic

Daniel Siegel, MD

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Bio Chemical Effects of Trauma on the Brain and how that effects the management of pain

CORTISOL

Blocks the integrative memory function of the hippocampus

It can become Neurotoxic

ADRENALIN

Increases encoding of emotions & perceptions (Body / Implicit Memory)

Hippocampal blockade effects managing implicit memory and disrupts abi

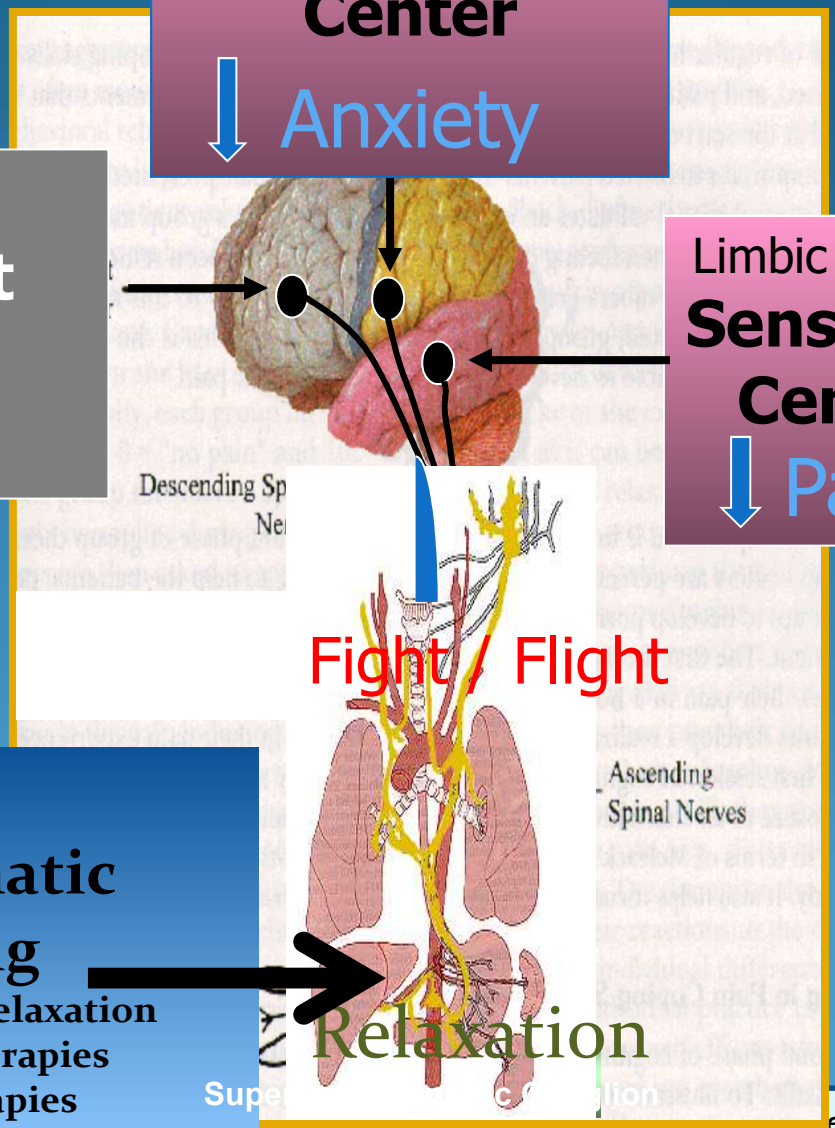
Daniel Siegel, MD

Electrical & Mechanical

Limbic System
Emotion Center
↓ Anxiety

PFC Thought Center

Limbic System
Sensation Center
↓ Pain



Fight / Flight

Diaphragmatic Breathing
Progressive Muscle Relaxation
Eye Movement Therapies
Mind Body Therapies
(Limbic Treatment)

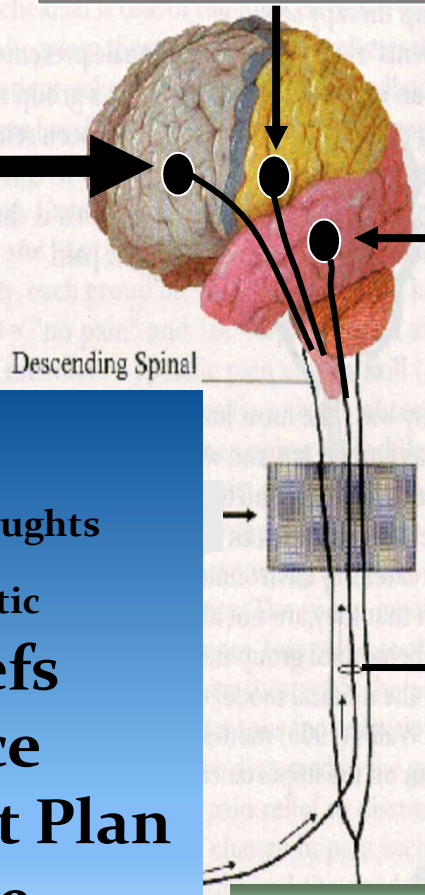
Relaxation

Autonomic Modulation

Imagination

Emotion Center
Limbic System

Thought Center
Prefrontal Cortex



Sensation Center
Limbic System

Kill ANTS Automatic Negative Thoughts
Talk Therapies CBT DBT Analytic
Shift Attitudes and Beliefs
Negotiate for Compliance
Engage Ego in Treatment Plan
Build Trust & Confidence

Chronic Pain / Anxiety Pathway

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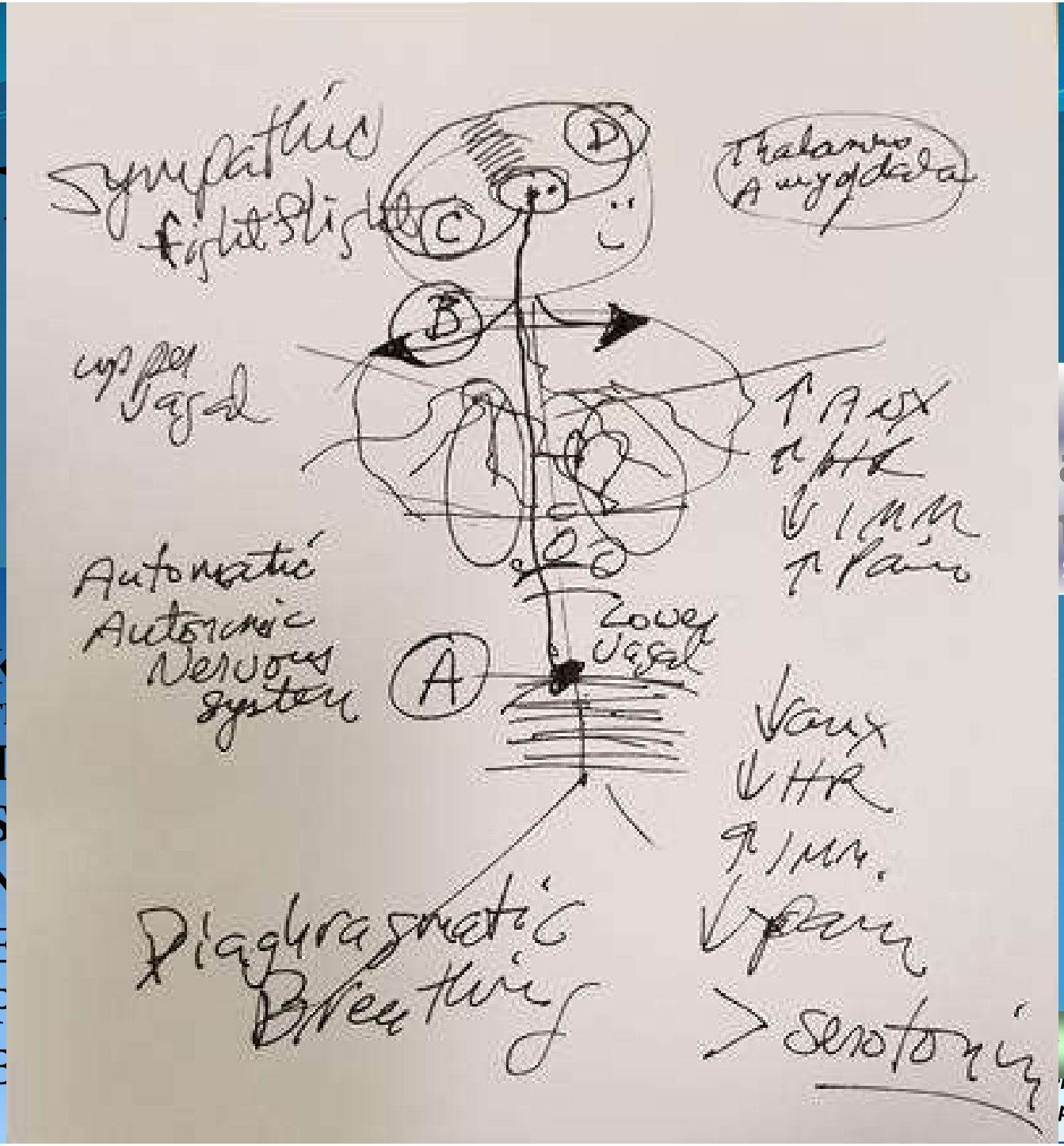

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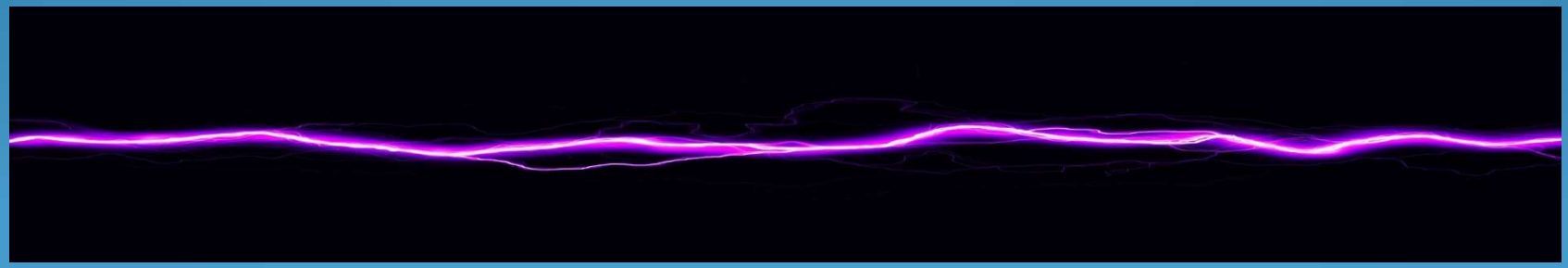
System

Modality Work

Matching practical techniques to patient's individual needs

1. Supportive (establishing therapeutic rapport / working alliance)
2. Psychodynamic (being aware that the river runs deep)
3. CBT (understanding the relationship btw thoughts & feelings)
4. MBM (breathing, PMR, neg thought stopping, hypnosis, prayer)
5. Eye Movement (EMR, EMDR, Brainspotting, finger tapping)
6. Sports Therapy (pre-visualization & mental rehearsal; relaxation phases)



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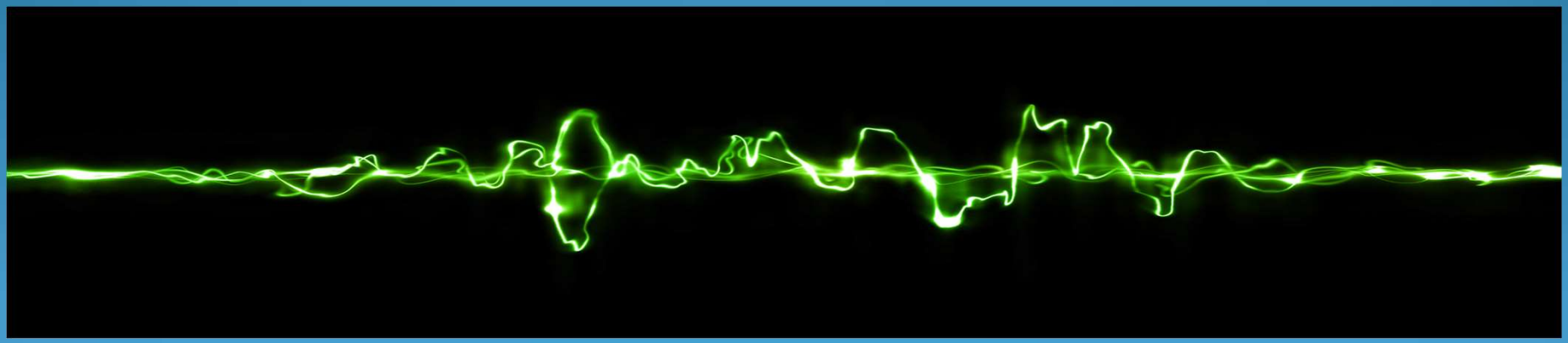

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Re-Build the Body Relationship

Educate patient to body mechanics

Diaphragmatic Breathing

Progressive Muscle Relaxation

Educate patient to the body's wiring

Autonomic Nervous System

The Role of the Limbic System

Modifying Prefrontal Attitudes Beliefs

Give Back Autonomy, Control & Responsibility for Healing

Include a proper respect and use of narcotics

Facilitate a variety of useful approaches