

Diagnosis and treatment of psychogenic non-epileptic seizures or functional seizures

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UAB MEDICINE



Philosophical Foundations of Neuroscience

According to Bennett and Hacker (2003)

What neuroscience cannot do is replace the wide range of ordinary psychological explanations of human activities in terms of reasons, intentions, purposes, goals, values, rules and conventions by neurological explanation. For it makes no sense to ascribe such psychological attributions to anything less than the animal as a whole. It is the animal that perceives, not parts of its brain, and it is human beings who think and reason, not their brains. The brain and its activities make it possible for us, not for it, to perceive and think, to feel emotions, and to form and pursue objects.

A model of risk factors

Predisposing	Precipitating	Perpetuating	Personality
Genetic factors	Exposure to illness	Hypersensitivity/hypervigilance/somatization	Neuroticism/perfectionism
Biological vulnerabilities	Physical injury	Physiological arousal	Stress reactivity
Pre-existing medical illness	Viral infection	Chronic Pain	Emotional inhibition
Adverse life events	Inhaled toxic substances /noxious odors	Fear-avoidance	Low self-esteem/efficacy
Symptom modeling	Drug/medication induced side effect	Catastrophic thinking	External locus of control
Attachment profiles	Severe fatigue	Sick role	Suggestibility
	Forced choice consequences	Litigation or disability	
	Adverse life events/stress	Medical uncertainty/stigma	

Diagnosing: *Helpful primers to increase understanding and compliance*

**Cellphone
Food poisoning
Traffic detour**

VIDEO: What is FND or Functional Neurological Disorder

Patient-Provider Roleplay

Fielding diagnostic and intervention questions

“Is this all in my head”

**Brain is the control center
Classical conditioning
Observational learning**

“I am faking it”

**Biologic survival mechanisms
Predictive memory/habituated patterns
Involuntary vs. voluntary movements**

“I did this to myself”

**Diagnosis across the lifespan
Normalize guilt and shame
Identify motivations**

“I cannot handle stress”

**Stress as a human condition
Helplessness/hopelessness
Whole person care**

***“I am not stressed so why is
this happening to me?”***

**Predispositional factors
Correlation vs. causation
Locus of control**

***“I have had a traumatic
experience”***

**Future orientation
Regaining control narrative
Vulnerabilities/Resilience**

Intervention

Cognitive, Behavioral, and Neurobehavioral

Intervention: Primary, secondary, tertiary

Intervention	Rationale
Early identification	Diagnosis of inclusion vs. exclusion
Appropriate diagnostic workup	Over and/or under performing diagnostic workup; iatrogenic effects (e.g., medical trauma, PPNES, etc.)
Appropriate and timely diagnosis and intervention	Inpatient vs. outpatient
Individualized and comprehensive coordination of care	Leveraging consultation; failure to provide a tailored treatment plan may cause secondary medical complications (e.g., malnutrition)

Intervention

Cognitive, Behavioral, and Neurobehavioral

Retraining and Control Therapy (ReACT)

Treatment intervention with 7 modules identifying triggers (conditioned stimuli) and symptoms (conditioned responses) to choose opposing responses to unpair these and help the patient regain control and retrain the symptoms.

[VIDEO: Interdisciplinary Functional Neurologic Disorder FND Program](#)

Neurobehavioral Therapy (NBT)

Treatment intervention includes 12 weekly sessions with the first six sessions focused on information about the patient, their seizures/episodes, and sources of stress/tension in their life, and six sessions learning and using tools to modify or offset this stress and tension. There is weekly reading and homework.

Cognitive-Behavioral Therapy

Treatment intervention(s) that include related theories (e.g., habit reversal), behavioral activation and medicine, and cognitive restructuring, as well as provide broad coping skills to manage the symptoms.

Treatment Goals

The overall goal across interventions is for control over symptoms and/or remission with a return to or improved functional baseline via an increase in awareness, sense of agency, adaptive coping, and overall health and wellness

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QUESTIONS