STAY AWAKE: INSIGHTS INTO THE DIAGNOSIS AND MANAGEMENT OF NARCOLEPSY

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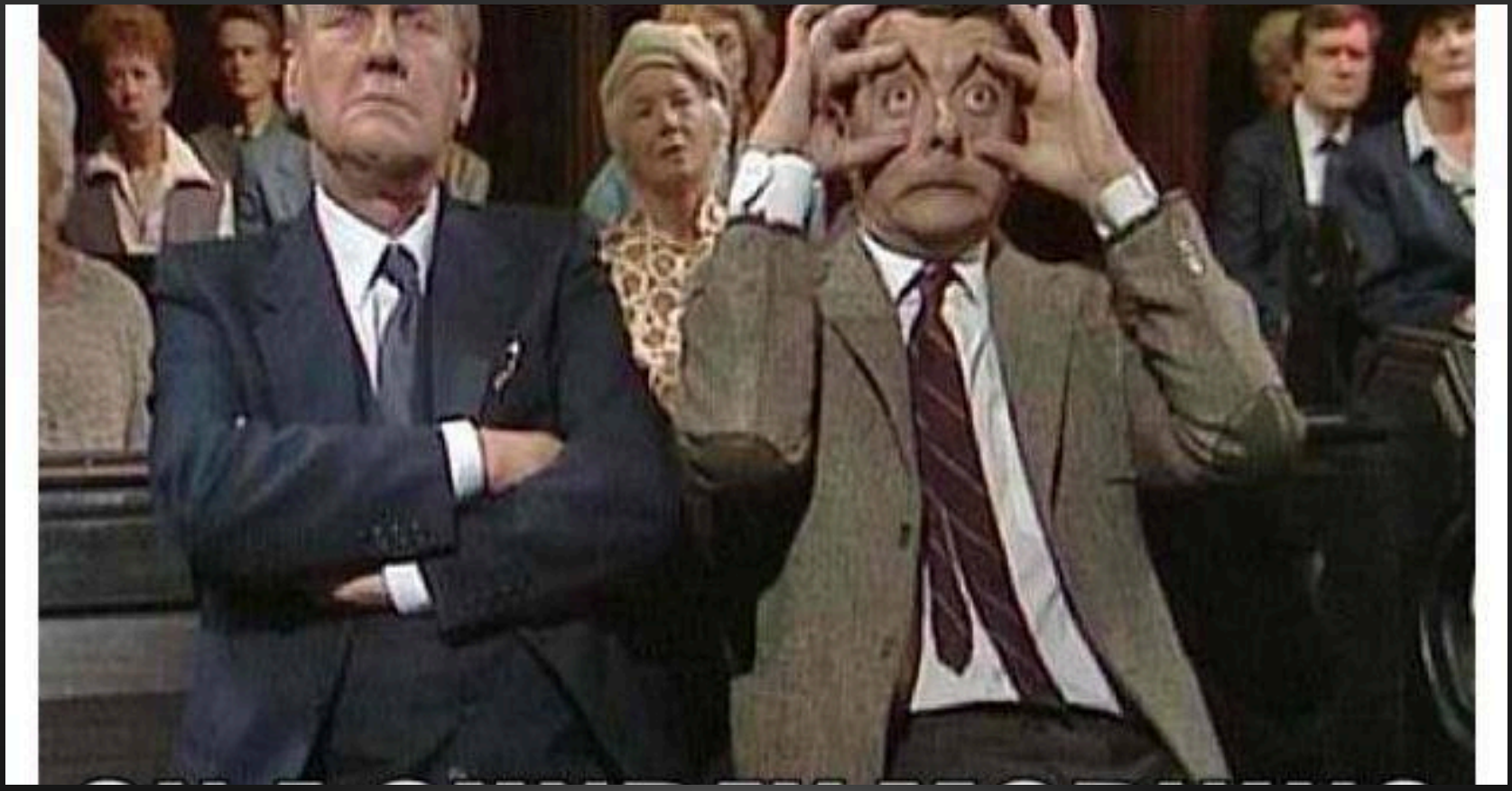
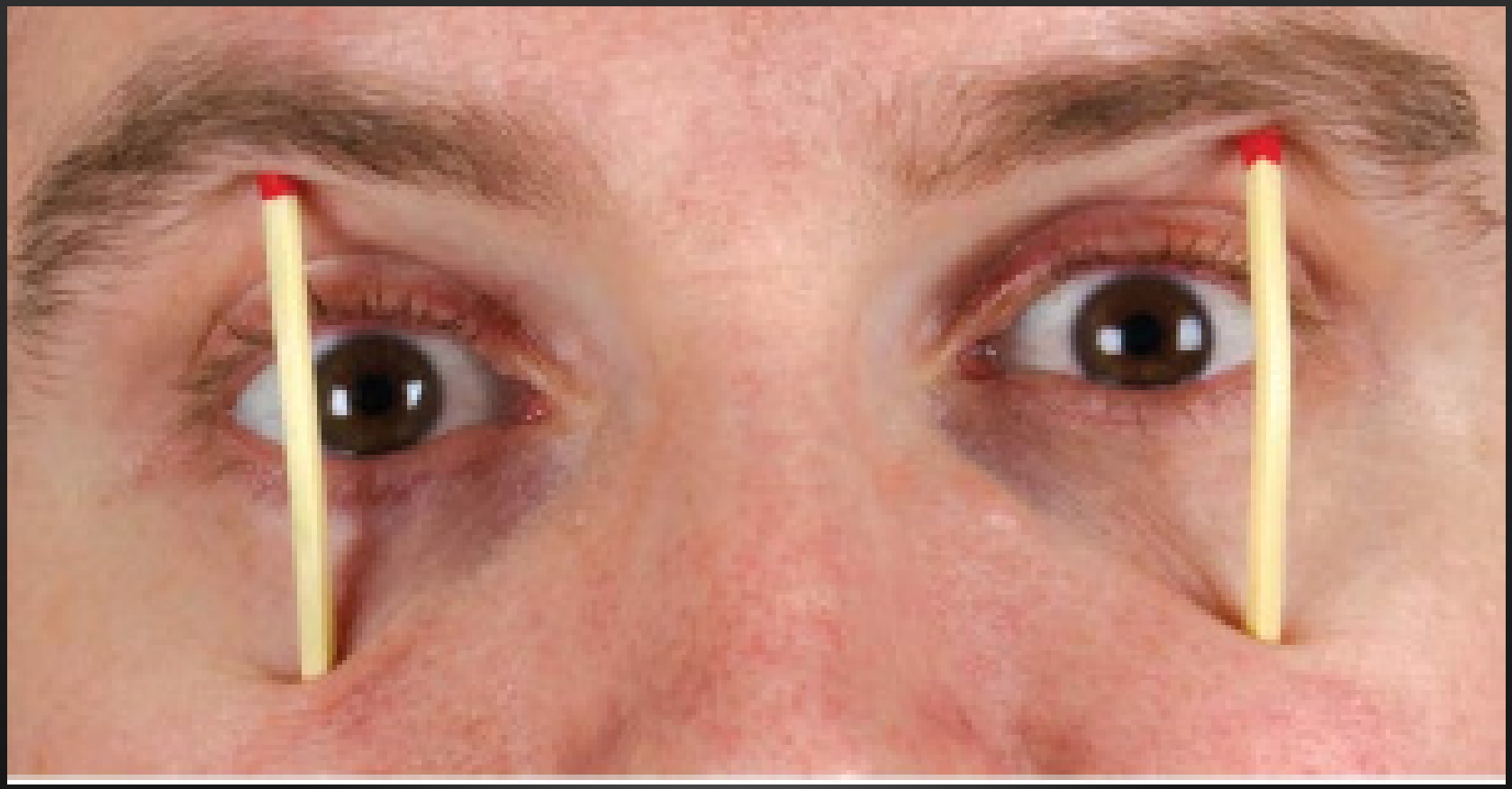




FINANCIAL DISCLOSURE

NONE RELEVANT TO THIS TALK

Speaker's Bureau, Boehringer Ingelheim (no medication for sleep disorders)

Member, Board of Trustees, Narcolepsy Network (non – profit, unpaid position)

WHAT IS NARCOLEPSY

EPIDEMIOLOGY

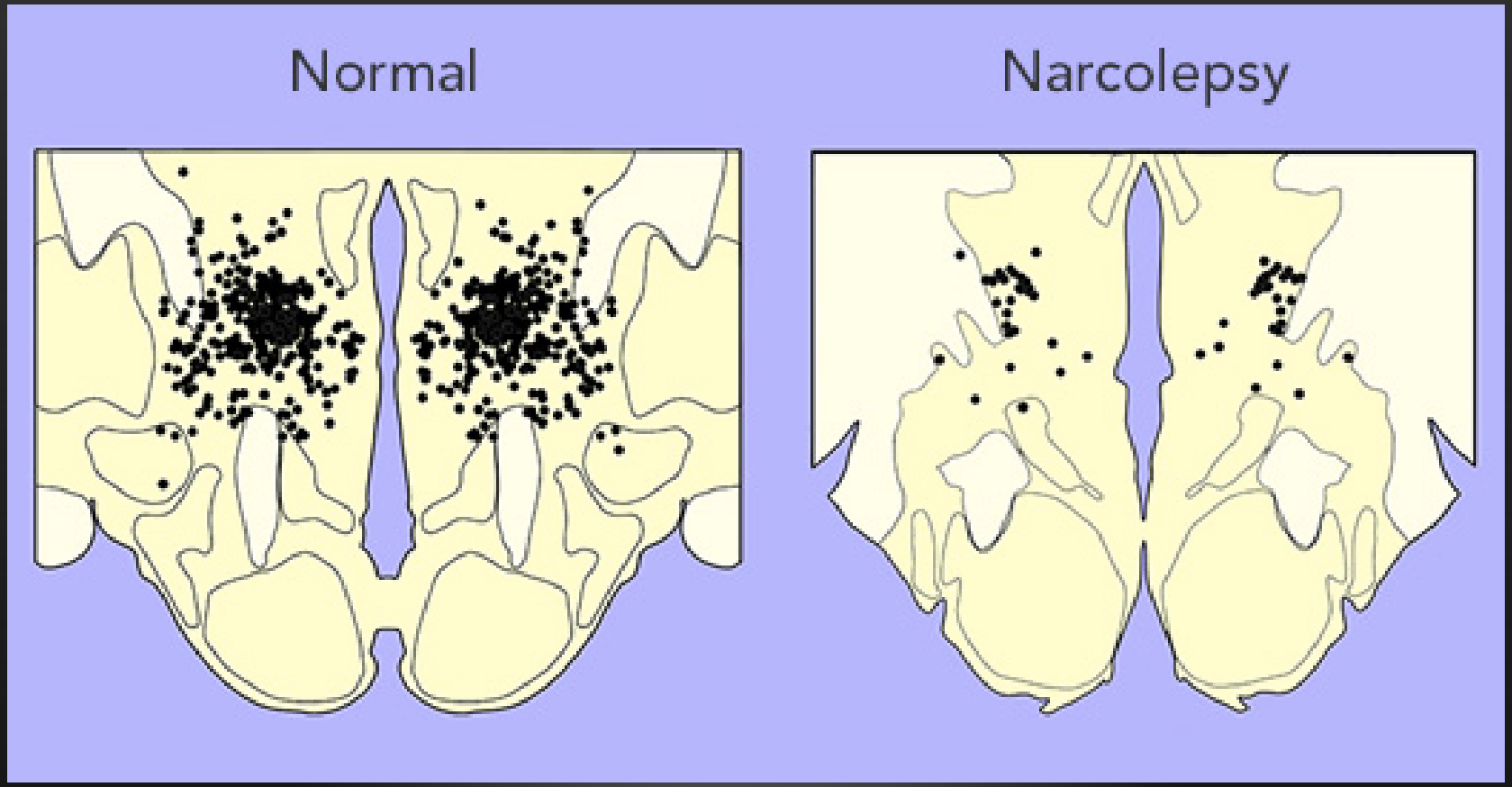
Prevalence 1: 3,000 (NINDS)

IS NARCOLEPSY TOO ESOTERIC

- MUSCULAR DYSTROPHY Duchenne)- 1: 5,600- 1: 7, 700 males age 5-24 (CDC)
- Lung Cancer- 7.4: 10,000 (males) = 1: 1,351 ; 5.2:10,000 (females)= 1:1,923 (CDC)
- Colorectal cancer- 4.6:10,000 (males)= 1:2,173; 3.5:10,000 (females) = 1:2,857 (CDC)
- Myasthenia Gravis- 1.4-2.0: 10,000 =1: 5000 to 1: 7,000 (myatheniagravis.org)
- Lyme Disease 0.7:10,000= 1:14000 (CDC, 2012)

- Tuberculosis; Prevalence is 1:25,000

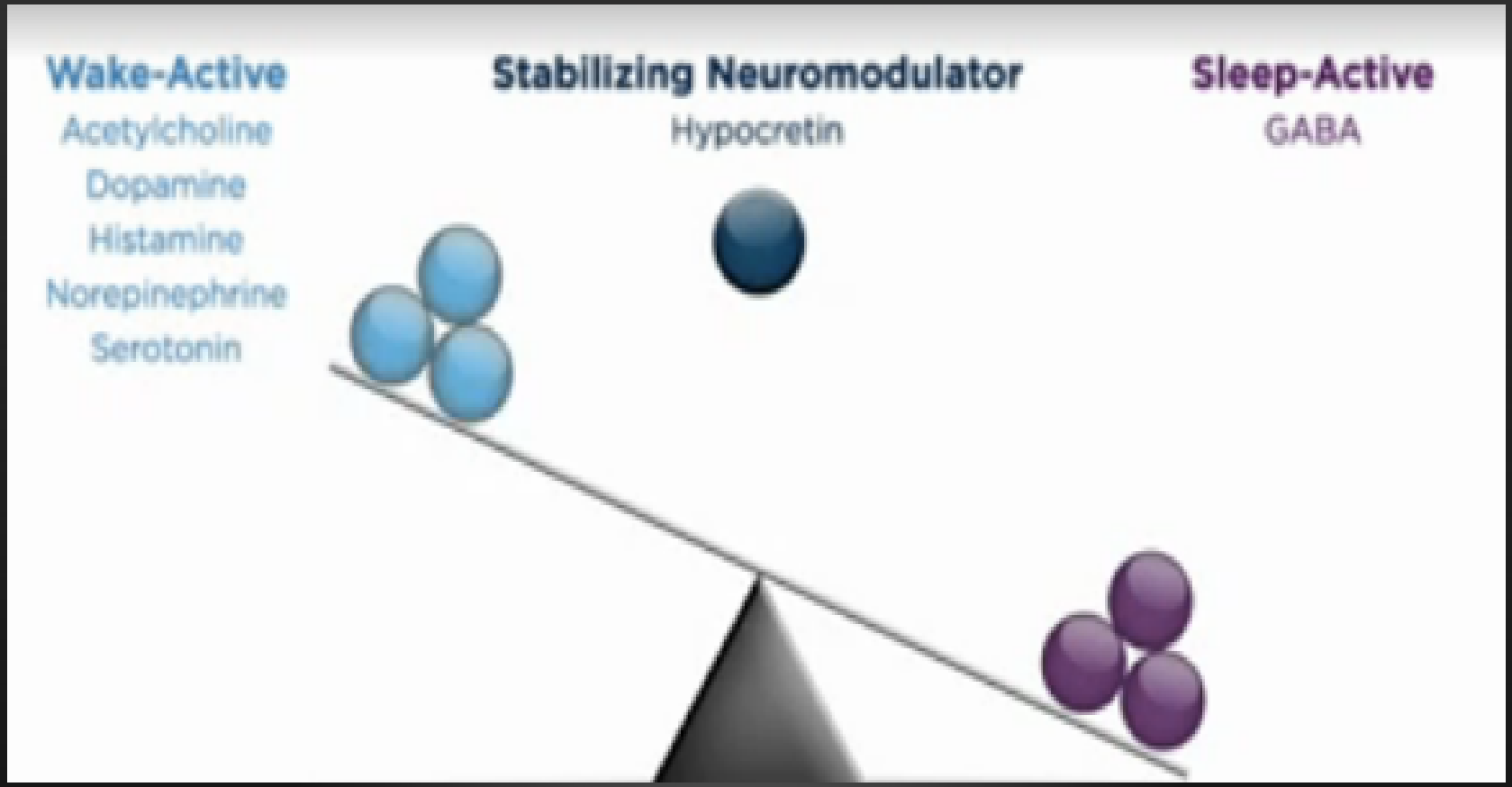
HYPOCRETIN SECRETING CELL LOSS



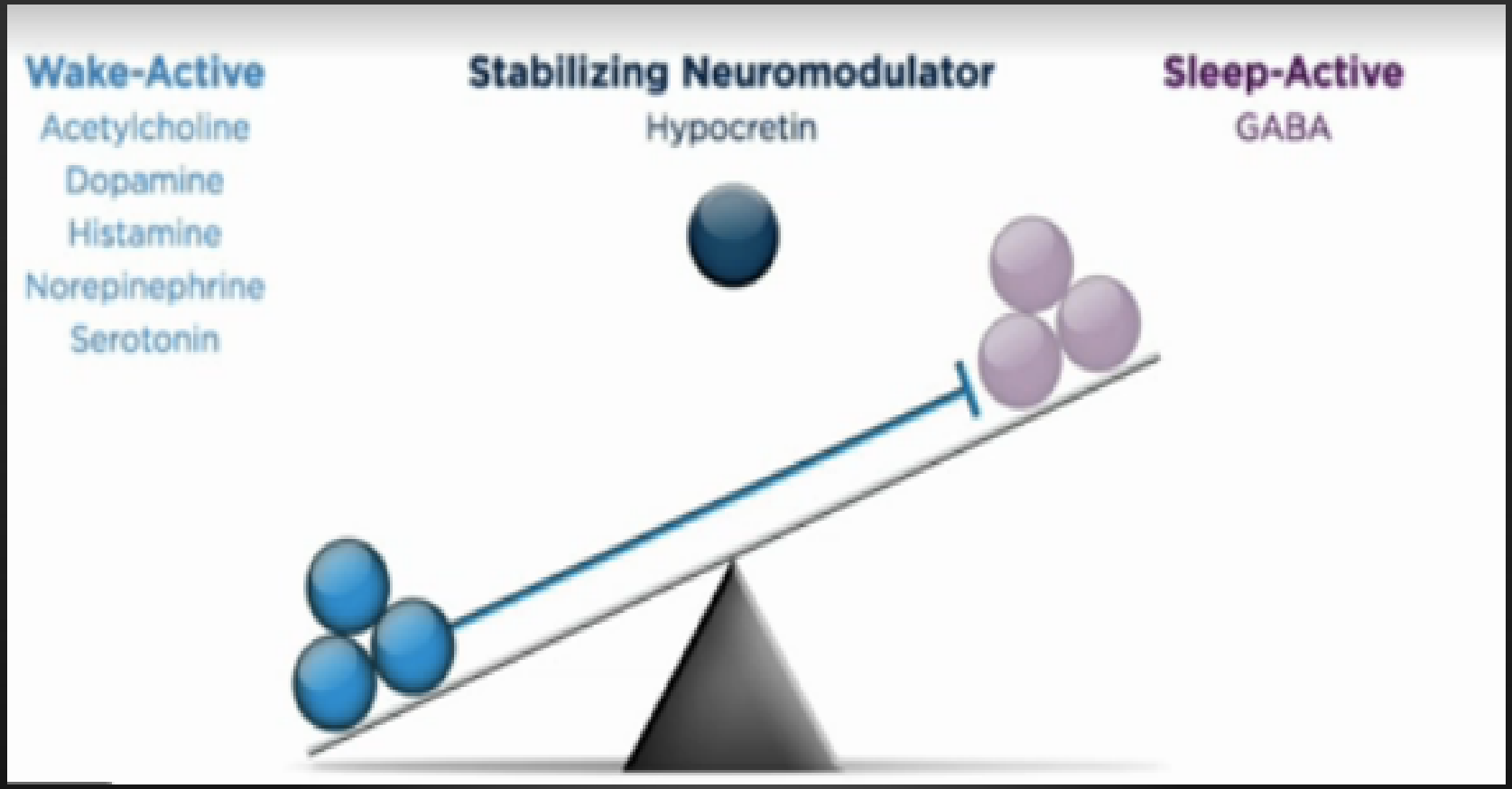
WHAT CAUSES NARCOLEPSY

- GENETIC PREDISPOSITION (HLA DQB1*0602-HOMOZYGOUS) or HLA DQB1*0602/DQB1*0301

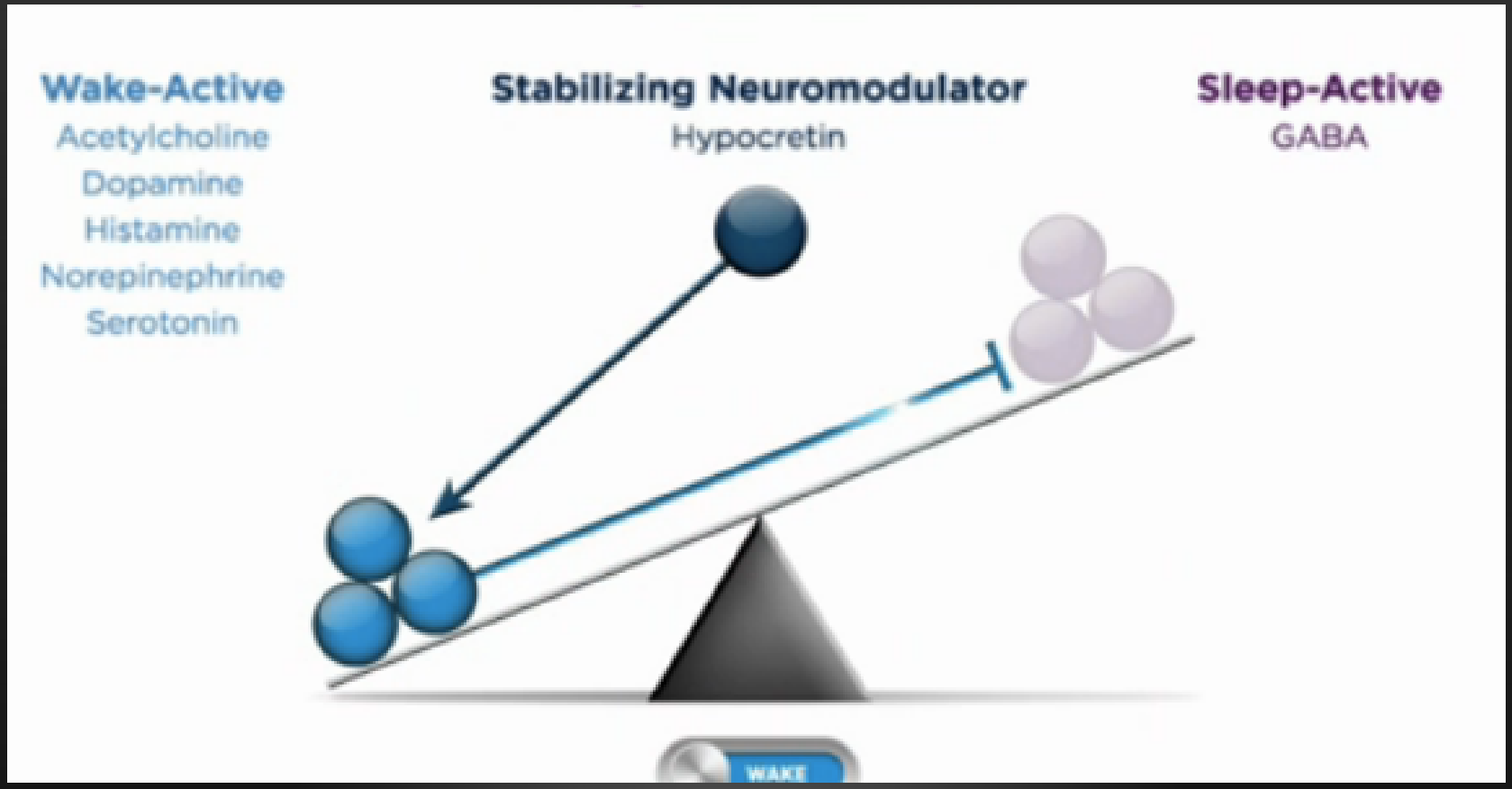
- IMMUNE MEDIATED DAMAGE TO HYPOCRETIN SECRETING CELLS


Wake-Active
Acetylcholine
Dopamine
Histamine
Norepinephrine
Serotonin
Stabilizing Neuromodulator
Hypocretin
Sleep-Active
GABA

WAKEFULNESS



STAY AWAKE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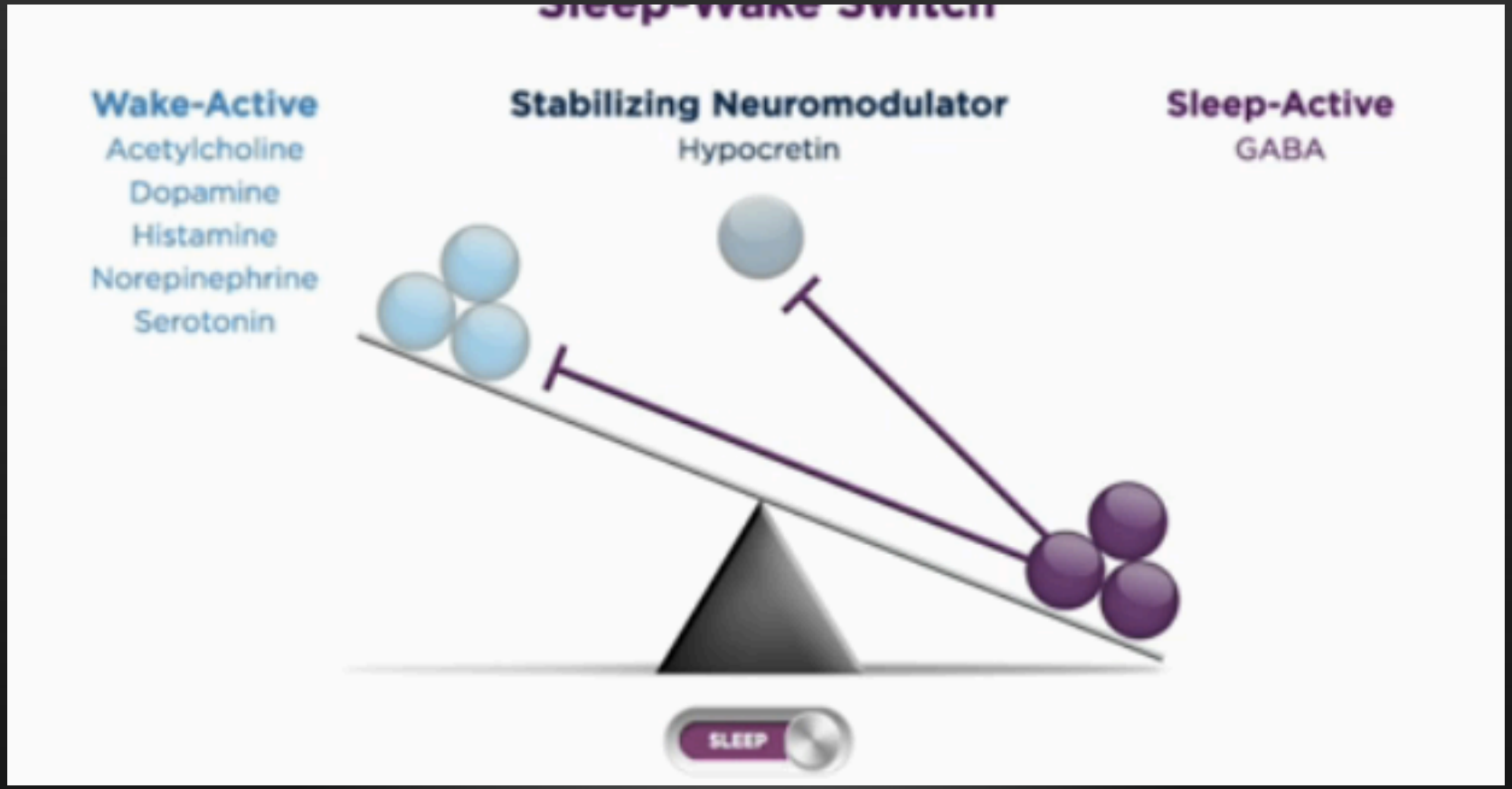
WAKE

SLEEP


Sleep-Wake Switch
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SLEEP

Sleep-Wake Switch: Narcolepsy With Cataplexy

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Stabilizing Neuromodulator
Hypocretin

Sleep-Active
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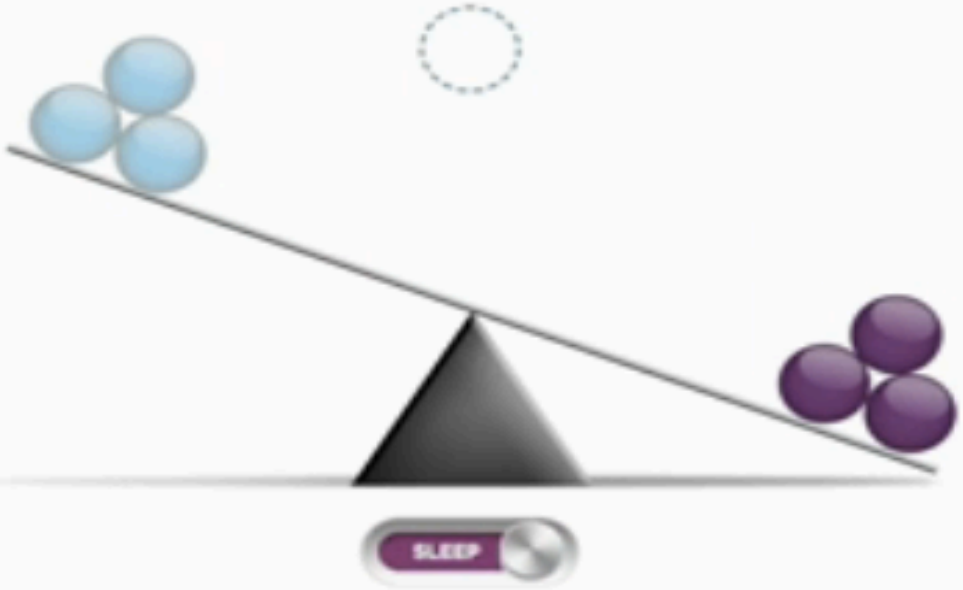

Sleep-Wake Switch: Narcolepsy With Cataplexy

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Stabilizing Neuromodulator
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SYMPTOMS

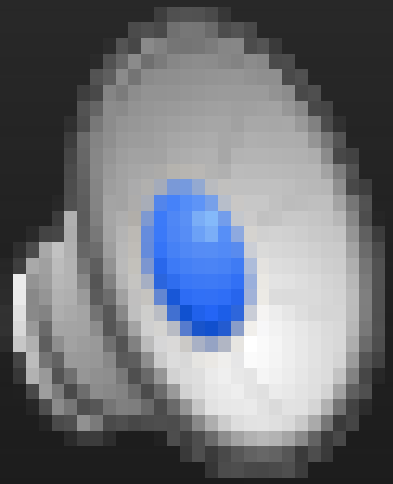
C Cataplexy

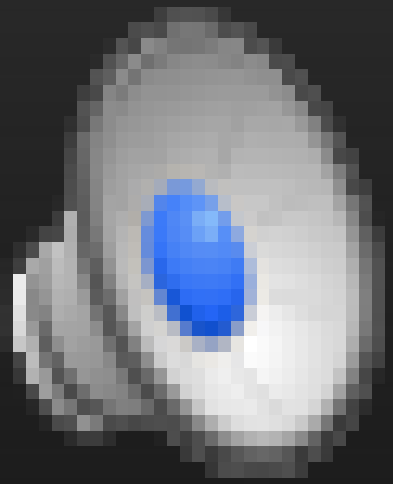
H Hypnagagogic/ Hypnopompic Hallucinations

E Excessive Daytime Sleepiness

S Sleep Paralysis

S Sleep Disruption





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MANY FACES OF NARCOLEPSY

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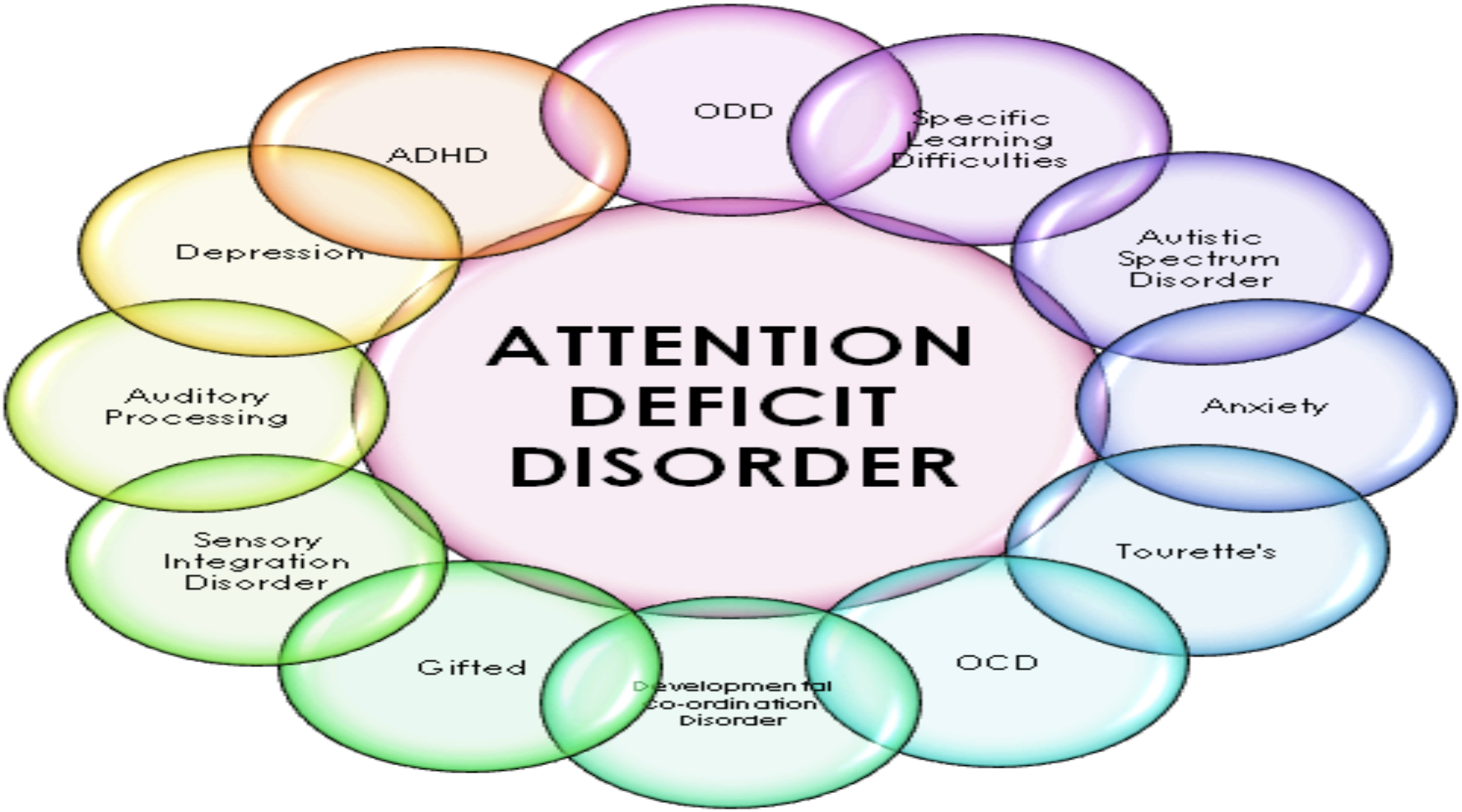
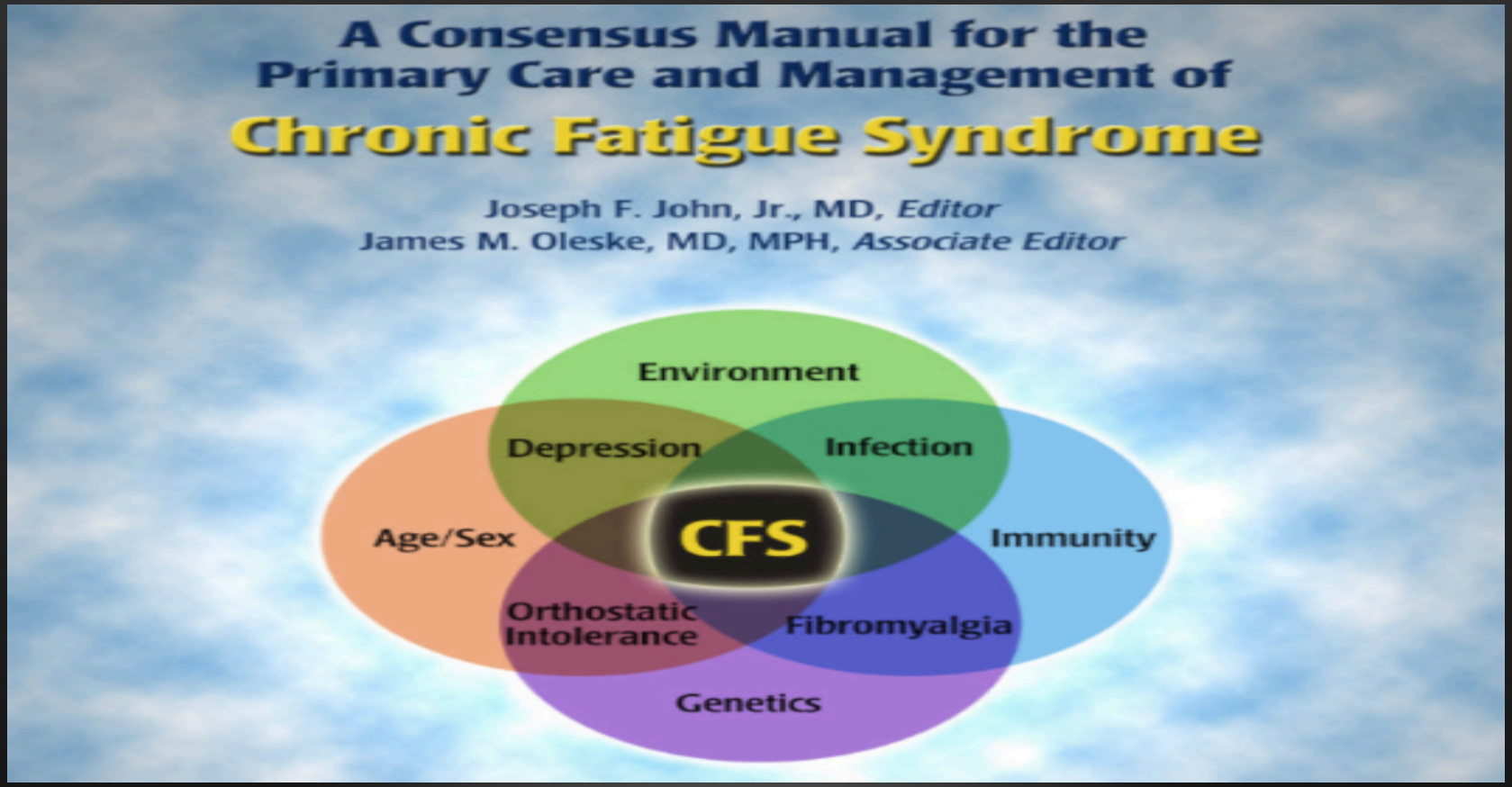
MANY FACES OF NARCOLEPSY

LAZY CHILD


ATTENTION DEFICIT DISORDER
ADHD
ODD
Specific Learning Difficulties
Autistic Spectrum Disorder
Anxiety
Tourette's
OCD
Developmental Co-ordination Disorder
Gifted
Sensory Integration Disorder
Auditory Processing
Depression

MIMICS

MIMICS


A Consensus Manual for the
Primary Care and Management of
Chronic Fatigue Syndrome
Joseph F. John, Jr., MD, Editor
James M. Oleske, MD, MPH, Associate Editor
Environment
Depression
Infection
Age/Sex
CFS
Immunity
Orthostatic Intolerance
Fibromyalgia
Genetics

SYMPTOMS

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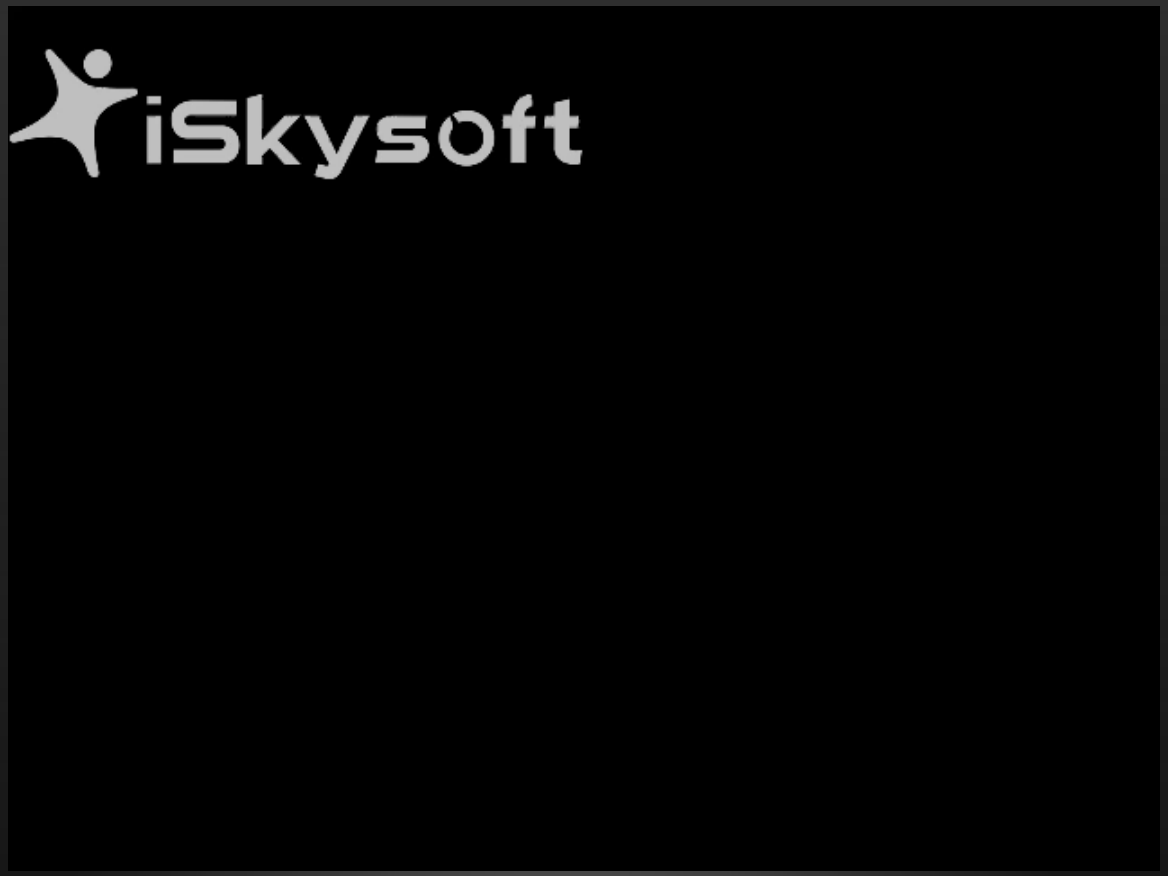
SLEEP PARALYSIS- A RENDITION



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OTHER SLEEP DIOSRDERS MASQUERADING NARCOLEPSY

- UPPER AIRWAY RESISTANCE SYNDROME
- INSOMNIA
- CIRCADIAN RHYTHM DISORDERS

OTHER MIMICS

- CONVERSION DISORDER
- KLEIN LEVINE SYNDROME
- SLEEP DEPRIVATION
- Neimen Pick C disease
- Tumors, sarcoidosis, arteriovenous malformations affecting the hypothalamus
- Multiple sclerosis plaques impairing the hypothalamus
- Paraneoplastic syndrome anti-Ma2 antibodies
- Coffin-Lowry syndrome

NARCOLEPSY WITHOUT CATAPLEXY

- Primary Narcolepsy without Cataplexy
- Head trauma
- Myotonic dystrophy
- Prader-Willi syndrome (rarely with cataplexy)
- Parkinson’s disease
- Multisystem atrophy

DIAGNOSIS

- OVERNIGHT SLEEP STUDY FOLLOWED BY MULTIPLE SLEEP LATENCY TEST
- CSF HYPOCRETIN LEVELS

TREATMENT

MEDICATIONS	BEHAVIORAL INTERVENTIONS, EDUCATION AND SUPPORT
1. GHB (XYREM) 2. WAKE PROMOTING AGENTS: Modafinil and Armodafinil 3 Stimulants: Methylphenidate, Amphetamines 4. Antidepressants: TCA, SSRI, SNRI (REM Suppressants- increase REM pressure and may worsen cataplexy when stopped)	1. Schedule Naps 2. Safety – modification of job, driving considerations, sports activities. 3. Support Groups- Narcolepsy Network, local support groups 1. Service dogs

~~DIS-~~ABILITY

KRISTEN GIRAULT- MISS LOUISIANA 2013

JIMMY KIMMEL

NICOLE JERAY- LPGA

IS NARCOLEPSY UNDERDIAGNOSED?

IS NARCOLEPSY OVERDIAGNOSED?

Consequence of Ignoring Your Sleep Problems