

# SYLLABUS

Marrakesh, Morocco, November 12-17, 2011

XX<sup>th</sup> WORLD CONGRESS OF NEUROLOGY



SOCIÉTÉ MAROCAINE  
DE NEUROLOGIE

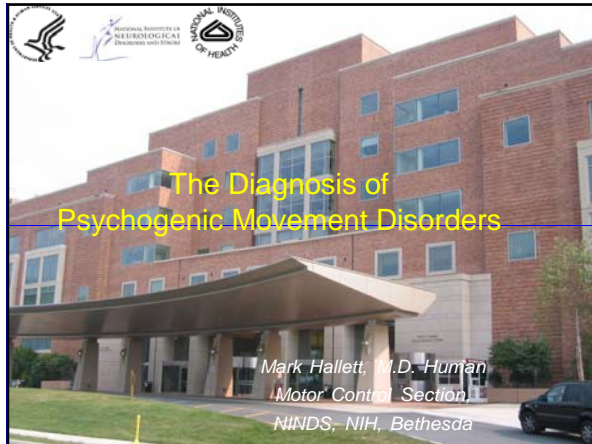
WCN Education Program  
Sunday, 13 November, 2011  
07:00-08:00

**DIAGNOSIS OF PSYCHOGENIC MOVEMENT DISORDER**

Chairperson: **Mark Hallett, USA**

**DIAGNOSIS OF PSYCHOGENIC MOVEMENT DISORDERS**  
**Mark Hallett, USA**





## Psychogenic movement disorders

- Movement disorders of presumed psychiatric etiology
- Psychiatric classification
  - Somatoform disorder
    - Conversion disorder
    - Somatization disorder
  - Factitious disorder
  - Malingering

## Conversion disorder

- An unconsciously produced symptom presumably resulting from a psychological disorder.
  - The psychological disorder is converted into the symptom as a way of dealing with the disorder
  - This is the “primary gain” of conversion
  - “Secondary gains” are the benefits of being sick

## Somatization disorder

- Recurrent and multiple complaints of several years' duration (beginning before 30) which has sought; dynamics similar to conversion
- Must have multiple symptoms

## Factitious disorder

- Symptoms are intentionally produced (voluntary) because of a psychological need
- Includes Munchausen's syndrome

## Malingering

- Symptoms that are voluntarily produced for a specified goal such as financial compensation, avoidance of work, evasion of criminal prosecution or acquisition of drugs
- NOT considered a mental disorder

## Diagnosis of Factitious or Malingering Disorders

- How to tell a voluntary movement when the patient claims that it is involuntary
- How to tell a is
- A challenge!
  - Secret surveillance

## Concurrent Psychiatric Disorder

- Depression
- Anxiety
- Personality Disorder (histrionic personality?)
- La belle indifference
  - Inappropriate absence of distress despite an unpleasant symptom

## Biopsychosocial Model

- Etiology of PMD is really multifactorial and psychiatric diagnoses are currently incomplete and crude
- Basic biology stress responsivity
- **Psychologic** factors—depression, anxiety
- **Social** factors—physical and emotional trauma; childhood abuse

## Overlap of Neurologic Disorders and Psychogenic Movement Disorders

- 10-15% of patients with psychogenic movement will a neurological disorder also

## Movement Clues suggesting a Psychogenic Movement Disorder

- Abrupt onset, spontaneous remissions
- Inconsistent movements (variable pattern, severity, and body distribution)
- Mixture of types of movements
- Decrease or disappear with distraction
- Paroxysmal
- Response to placebo, suggestion or psychotherapy
- Incongruous movement (e.g., bizarre gait, marked slowness, excessive startle)

## Other Clues suggesting a Psychogenic Movement Disorder

- False weakness or sensory loss
- Multiple MUS
- Self-inflicted injury
- 
- Psychiatric disorder and secondary gain
- Marked fatigue
- Disability out of proportion to signs
- Pending litigation
- Employed in the health profession

### Suggestibility



### Psychogenic tremor: clinical features

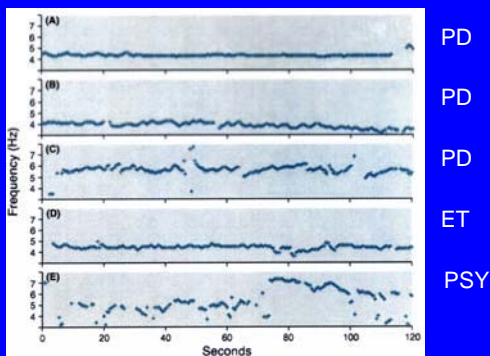
- Complex movements
- Present at rest, posture and action
- Variability of frequency, direction, amplitude
- Absence of finger tremor
- Entrainment or alteration with rhythmic tapping of another body part



### Psychogenic tremor: physiological features

- Entrainment or substantial alteration with rhythmic tapping of another body part
- Exact same frequency in different limbs
- Interruption of tremor with quick movement of another limb

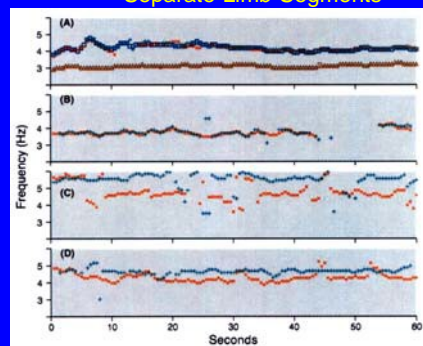
### Physiological Analysis of Tremor



PD  
PD  
PD  
ET  
PSY

O'Suilleabhain & Matsumoto 1998

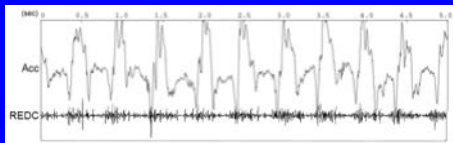
### Physiological Analysis of Tremor Separate Limb Segments



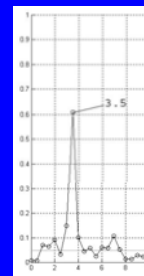
PD  
**Common in PSY tremor**  
PD  
ET

O'Suilleabhain & Matsumoto 1998

## A case of palatal tremor



When tapping with the right 3<sup>rd</sup> finger, the palatal tremor (as measured with an accelerometer on the neck) was entrained.



Coherence could be demonstrated, here at 3.5 Hz.



Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

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Neuroscience Letters 370 (2004) 135–139

Neuroscience  
Letters

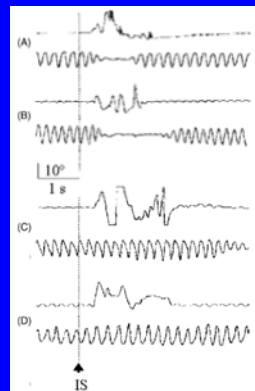
[www.elsevier.com/locate/neulet](http://www.elsevier.com/locate/neulet)

### Transient arrest of psychogenic tremor induced by contralateral ballistic movements

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Normal  
Repetitive  
Movement

Psychogenic  
Tremor

Parkinson  
Tremor

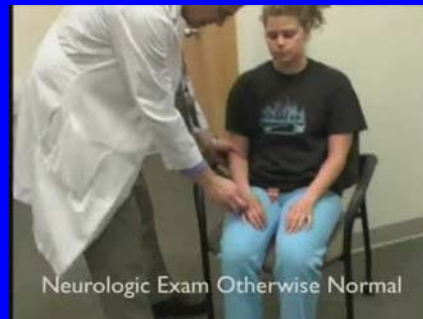
Essential  
Tremor

Kumru et al. 2004



## Psychogenic myoclonus: Clinical features

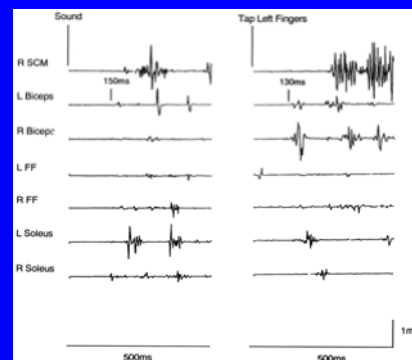
- Clinical features incongruous with “organic myoclonus”
  - Long and/or variable latency for stimulus induced jerks
  - Anticipatory jerks that can be demonstrated by stopping the tendon hammer just short of contact
- Exaggerated startle



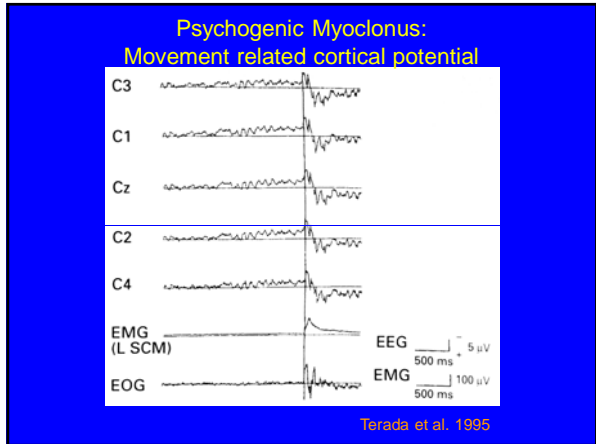
## Psychogenic myoclonus: Physiological features

- Variable latencies to the onset of stimulus induced jerks
- Greater latencies than that seen in reflex myoclonus of cortical or brainstem origin
- Latencies longer than the fastest voluntary reaction time of normal subjects
- Variable patterns of muscle recruitment within each jerk
  - Thompson et al. 1992
- Normal looking BP prior to the jerk
  - Terada et al. 1995

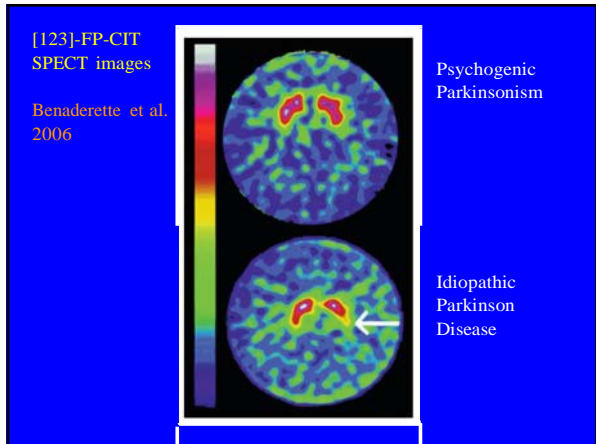
## Psychogenic Myoclonus



Thompson et al. 1992



- ### Psychogenic Parkinsonism: Clinical Features
- Extreme slowness
  - Tremor at rest that does not improve with
  - Sudden onset, maximum disability early
  - Gegenhalten rather than true rigidity



- ### Gait Disorders
- Often bizarre patterns
  - One clue is that the patient's balance is demonstrated to be better claimed





## How do you make a definitive diagnosis?

- Do you just refer to psychiatry?

## Only a neurologist can make the diagnosis of a psychogenic movement disorder.

A psychiatrist cannot do this easily; the role of psychiatry is to identify the underlying psychiatric disorder and help treat it.

## Treatment Considerations

- How to tell the patient what's wrong
  - Not easy
  - Not one method for all cases
  - We use the term "functional"
- Psychiatry for psychotherapy and pharmacotherapy as appropriate
- Hypnosis, role for placebo?
- Rehabilitation

It is important to recognize that PMD may be only one manifestation of underlying psychosocial problems

Even if the movement disorder is better, there might well be a different conversion or medically unexplained symptom.

