CONVERSION DISORDER
Conversion Disorder
Definition

• An illness of symptoms or deficits affecting voluntary motor or sensory functions, suggesting another medical condition, but judged due to psychological factors because of preceding conflicts or other stressors.

• Symptoms or deficits are not intentionally produced, not due to substance, and not limited to pain or sexual symptomatology.

• Gain is primarily psychological, and not social or monetary or legal.
Conversion Disorder
Definition

• A disturbance of bodily function not conforming to current concepts of neurological anatomy and physiology:
  – Characterized by the presence of one or more neurological symptoms, unexplained by a known neurological or medical disorder;
  – Typically occurring in a setting of stress, and producing considerable dysfunction;
  – Requiring for diagnosis the association of psychological factors, present at the initiation or exacerbation of symptoms.
Conversion Disorder

History

• A disorder stemming from early concepts of hysteria:
  – Sigmund Freud introduced the term conversion (based on his work with Anna O); and
  – Hypothesized that the symptoms of conversion reflect unconscious conflict.
Conversion Disorder

History

• Why is the word hysteria not used anymore
• What is the connotation of the word ‘functional’
• Freud restored ‘dignity’ to the diagnosis.
• The effect on consciousness…..
Freud proposed a different mechanism in which unwelcome experiences are ‘repressed’ into the unconscious, but in doing so become ‘converted’ into physical symptoms: “she repressed her erotic idea and transformed the amount of its affect into physical sensations of pain”.\(^8\) Freud argued that although the repression was deliberate, in order to escape from distress (which he called ‘primary gain’), the conversion was not: “The splitting of the consciousness ...is accordingly a deliberate and intentional one ...the actual outcome is something different from what the subject intended”.\(^8\) ‘Secondary gains’ could also accrue as the result of the repression, which is why it is necessary to divide.
Conversion Disorder

- DSM-IV-TR conversion d/o=dissociative d/o in ICD-10
- Comorbid dissociative d/o in approximately 30% of inpatients with DSM-IV-TR conversion disorder.

1. One or more symptoms are present that either affect voluntary motor or sensory function or cause transient loss of consciousness.

2. The symptom is, after appropriate medical assessment, found not to be due to a general medical condition, the direct effects of a substance, or a culturally sanctioned behavior or experience.

3. One or more diagnostic features are present that provide evidence of internal inconsistency or incongruity with recognized neurological or medical disorder.

4. The symptom causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation.

Notes:

i. A relevant psychological stressor is often present but is not a requirement to establish the diagnosis.

ii. Malingered or feigned symptoms are not considered functional; however, proving the absence of feigning is not a requirement to establish the diagnosis.
Box 1 The four key diagnostic features of conversion disorder

1. Neurological symptoms involving motor or sensory symptoms or loss of consciousness
2. No evidence of organic (neurological) disease that can explain the symptoms
3. Associated psychological stressors (relevant to onset of symptoms)
4. Conscious simulation (feigning) is excluded
Conversion Disorder
Epidemiology

- Some symptoms, but not severe enough to warrant diagnosis in 1/3 of general population at some time
- Lifetime risk by some studies of 33% for either transient or longer-term disorder
- 25-30% of admissions to VA hospitals
- Range in general population of 11-300/100,000
- DSM-IV-TR range of 1-500/100,000
Conversion Disorder
Epidemiology

- Estimate of 20-25% admitted to a general medical service with conversion symptoms at some time during life
  - % on several psychiatric consultation services referred for assistance in diagnosis and management of conversion symptoms
- 24% in 500 psychiatric outpatients with at least one conversion symptom
Conversion Disorder
Epidemiology

• Ratio of women to men
  – Range of 2/1 to 10/1 in adults
  – Increased female predominance in children
• Symptoms in women more common on left side of body
• Women with conversion symptoms more likely to subsequently develop somatization disorder
• Association in men between conversion disorder and antisocial personality disorder
• Men with conversion disorder often involved in occupation or military accidents
Conversion Disorder
Epidemiology

• Onset at any age, but most common in late childhood to early adulthood (rare before 10 years of age, or after 35, but reported as late as the ninth decade of life)

• Probability of occult neurological or other medical condition high with onset of symptoms in middle or old age.
Conversion Disorder
Epidemiology

• Common Prototypes
  – Rural populations
  – Developing nations and regions
  – Persons with limited education and medical knowledge, or decreased IQ
  – Lower socioeconomic groups
  – Military personnel exposed to combat

• Increased Frequency
  – Relatives of probands with conversion disorder
  – Monozygotic, but not dizygotic, twin pairs
Conversion Disorder
Epidemiology

• Cultural norms are important considerations
  – The form of conversion may reflect cultural ideas about acceptable ways to express distress (e.g. falling, or an alteration of consciousness)
  – Behaviors resembling conversion or dissociative symptoms are aspects of certain culturally sanctioned religious and healing ceremonies
Conversion Disorder Comorbidity

• Common psychiatric conditions:
  – Depressive disorders (increased suicide risk)
  – Anxiety disorders
  – Somatization disorders
  – Conversion in schizophrenia reported but considered uncommon, yet ¼ to ½ admissions to a psychiatric unit for conversion disorder have significant mood disorder or schizophrenia

• Personality Disorders
  – 5 to 21% histrionic
  – 9 to 40% passive-aggressive/dependent
  – Antisocial

• Medical and especially neurological disorders occur frequently, with elaboration of symptoms stemming from original organic lesion
Conversion Disorder

Etiology

- Multidimensional
  - Psychoanalytic Factors
  - Learning Theory
  - Biological Factors
Conversion Disorder Etiology

• Psychoanalytic Factors
  – Repression of unconscious intrapsychic conflict (instinctual impulse, e.g. aggression/sexuality, and prohibitions of expression)
  – Conversion of anxiety into a physical symptom-”the symptom binds anxiety”
  – Symptoms allow partial although disguised expression of the forbidden wish or urge, such as to avoid conscious confrontation with the unacceptable impulses
  – The conversion disorder symptom has symbolic relation to the unconscious conflict (e.g. vaginismus with sexual desire, syncope with arousal, paralysis with anger)
  – Symptoms communicate need for special consideration/treatment
  – The individual may derive secondary gain, with symptoms serving as a nonverbal means of controlling or manipulating others
Conversion Disorder

Etiology

• Learning Theory
  – Conversion disorder considered as piece of classically conditioned learned behavior
  – Symptoms of illness, learned in childhood, are called forth as a means of coping with an otherwise impossible situation.
  – Presence of a Conversion Model
Conversion Disorder Etiology

• Biological Factors
  – Brain imaging
    • Hypometabolism of dominant hemisphere
    • Hypermetabolism of nondominant hemisphere
    • ? Impaired hemispheric communication
  – Corticofugal feedback
    • ? Excessive cortical arousal setting off negative feedback loops between the cortex and reticular formation w/ inhibition
  – Neuropsychological tests
    • Subtle cerebral impairments in verbal communication, memory, vigilance, affective incongruity, and attention
  – Increased incidence with head trauma/organicity
Hypermelaninism of nondominant

Excess cortical arousal sets off neg. feedback loops

Hypometabolism of Dominant

Cause
Conversion Disorder
Clinical Features

• Most common symptoms
  – Paralysis
  – Blindness
  – Mutism
Conversion Disorder
Clinical Features

• Sensory symptoms
  – Anesthesia and paresthesia common, especially in extremities (although all sensory modalities can be involved)
  – Distribution of the neurological deficit inconsistent with either central or peripheral neurological disease (e.g. stocking-and-glove anesthesia, and hemianesthesia beginning precisely along the midline)
  – Possible involvement of organs of special sense (deafness, blindness, tunnel vision)
    • Unilateral or bilateral
    • Intact sensory pathways by neurological exam (e.g. conversion disorder blindness: ability to walk around without collision or self-injury, with pupils reactive to light, and normal cortical evoked potentials.)
Conversion Disorder
Clinical Features

• **Motor symptoms**
  – Abnormal movements (gait disturbance, weakness/paralysis)
  – Movements generally worsen with calling of attention
  – Possible gross rhythmical tremors, chorea, tics, and jerks
  – Astasia-abasia (wildly ataxic/staggering gait, gross irregular/jerky truncal movements, thrashing/waving of arms-rare falls w/o injury)
  – Paralysis/paresis involving one, two, or all four limbs (w/o conformation to neural pathways)
  – Reflexes remain normal
  – No fasciculations/muscle atrophy (except chronic conversion)
  – Normal electromyography
Conversion Disorder

Clinical Features

• Seizure symptoms
  – Pseudoseizures
    • Differentiation from true seizure difficult by clinical observation alone
    • 1/3 of those with pseudoseizures have coexisting epileptic disorder
    • Tongue biting, urinary incontinance, and injuries after falling can occur (although generally absent)
    • Pupillary and gag reflexes retained
    • No postseizure increase in prolactin concentration
Conversion Disorder
Clinical Features

• Associated psychological symptoms
  – Primary gain
  – Secondary gain
  – La belle indifference
  – Identification
Conversion Disorder
Clinical Features

• Associated psychological symptoms
  – Primary gain
    • Internal conflicts remain outside awareness
  – Secondary gain
    • Tangible advantages and benefits as a result of being sick
      (excuses from obligations and difficult situations, support and assistance otherwise not forthcoming, control of behavior of others)
Conversion Disorder
Clinical Features

• Associated psychological symptoms
  – La belle indifference
    • Inappropriate cavalier attitude toward serious symptoms
      (lacking in some, but also in other seriously ill medical patients
      with stoic attitude-inaccurate determinant of conversion disorder)
  – Identification
    • Unconscious modeling of symptoms after someone considered
      important to the patient
    • With pathological grief reaction, bereaved persons commonly
      have symptoms of the deceased
Conversion Disorder
Clinical Features

• No specific standard laboratory tests
  – Absence of tests supports diagnosis

• Experimental psychophysiology
  – Unique sympathetic nervous system response as measured by skin conductance upon anxiogenic stimulus
  – More rapid cortical evoked potential spikes in contralateral sensory cortex upon physical stimuli
Are neurologic symptoms (e.g., motor weakness, sensory loss, blindness, speech abnormalities, tremor) inconsistent with pattern of known diseases and not explainable by neurologic or medical conditions?

Can organic causes (e.g. brain tumor, multiple sclerosis, myasthenia gravis, polio, stroke, dementia, neuropathies, Guillain-Barré Syndrome, lupus, spinal cord injuries, drug intoxication) be ruled out?

Are any of the following **social factors** present?
- Low socioeconomic status
- Lives in a rural area
- Low education level
- Lives in a developing nation or region
- Cultural issues/background

Are any of the following **psychological factors** present?
- Psychological stress
- Poor coping skills
- Internal psychological conflicts

Are any of the following **biological factors** present?
- Female gender
- Young age
- Impaired cerebral hemisphere communications
- Excessive cortical arousal

Are any of the following **comorbidities** present?
- Mood disorders
- Generalized anxiety disorder
- Phobia
- Obsessive compulsive disorder
- Posttraumatic stress disorder
- Dissociative disorder
- Schizophrenia
- Personality disorder

CONVERSION DISORDER

FIGURE 3. Step-wise guide for diagnosing conversion disorder
Abuse or trauma

Accumulation of life stressors

Suppression of expression of distress

Impaired emotional processing (disruptions in the dynamic modulation between limbic and sensorimotor networks)

Minimization of psychological factors and external locus of control

Conversion reaction

Family and sociocultural factors

Cognitive impairment and communication difficulties

Genetic, neurochemical, and hormonal factors

Family and sociocultural factors

Psychiatric comorbid conditions other than trauma

Posttraumatic stress disorder, dissociation

Iatrogenic factors
Conversion Disorder
Differential Disorder

The most important conditions in the differential diagnosis are neurological or other medical disorders and substance-induced disorders.

VIDEO EEG
Conversion Disorder
Differential Diagnosis

• Concomitant or previous neurological disorder or a systemic disease affecting the brain reported in 18% to 64% of cases of conversion disorder
• 25% to 50% of cases classified as conversion disorder eventually receive diagnoses of neurological or nonpsychiatric medical disorders
Differential Diagnosis

- **Neurological/medical disorders**
  - Dementia and other degenerative disorders
  - Brain tumors, subdural hematoma
  - Basal ganglia disease, myasthenia gravis, multiple sclerosis
  - Polymyositis, acquired myopathies
  - Optic neuritis
  - Partial vocal cord paralysis
  - Acquired myopathies
  - Guillain-Barre, Creutzfeldt-Jacob, periodic paralysis
  - AIDS (early neurological manifestations)
  - Systemic lupus erythematosus
  - Idiopathic and sarcoma-induced osteomalacia
  - Acquired, hereditary, and drug-induced dystonias
Conversion Disorder
Differential Diagnosis

• Psychiatric disorders
  – Schizophrenia
    Hallucinations presenting with conversion disorder generally present w/o other psychotic symptoms and often involve more than one sensory modality w/ vague or fantastic content.
  – Depressive disorders
  – Anxiety disorders
    Consider high anxiety states with phobia and panic attack associated with somatic complaints (e.g. difficulty swallowing)
  – Dissociative disorders
    Dual diagnosis possible
Conversion Disorder
Differential Diagnosis

• Somatization disorder
  – Includes possible sensorimotor symptoms, but chronic coarse beginning early in life involving many other organ systems

• Hypochondriasis
  – No actual loss or distortion of function
  – Chronic somatic complaints, not limited to neurological symptoms, with characteristic attitudes and beliefs (disease phobia)

• Body dysmorphic disorder
  – Imagined or slight defect in appearance, with no voluntary motor or sensory dysfunction

• Pain disorder—symptoms limited to pain (solely psychological)

• Sexual dysfunction—symptoms limited to sex
Conversion Disorder
Differential Diagnosis

• Malingering and factitious disorder
  – Symptoms under conscious, voluntary control
  – History with malingering usually more inconsistent and contradictory than with conversion disorder
  – Fraudulent behavior clearly goal directed with malingering
## Conversion Disorder
### Distinctive Physical Findings

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunnel vision</td>
<td>Visual fields</td>
</tr>
<tr>
<td>Profound monocular blindness</td>
<td>Swinging flashlight sign (Marcus Gunn)</td>
</tr>
<tr>
<td></td>
<td>Binocular visual fields</td>
</tr>
<tr>
<td>Severe bilateral blindness</td>
<td>“Wiggle your fingers; I’m just testing coordination.”</td>
</tr>
<tr>
<td></td>
<td>Sudden flash of bright light</td>
</tr>
<tr>
<td></td>
<td>“Look at your hand.”</td>
</tr>
<tr>
<td></td>
<td>“Touch your index fingers.”</td>
</tr>
</tbody>
</table>
## Conversion Disorder

### Distinctive Physical Findings

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aphonia</td>
<td>Request a cough</td>
</tr>
<tr>
<td>Intractable sneezing</td>
<td>Observe</td>
</tr>
</tbody>
</table>
Conversion Disorder
Distinctive Physical Findings

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coma</td>
<td>Examiner opens eyes</td>
</tr>
<tr>
<td></td>
<td>Ocular cephalic maneuver</td>
</tr>
<tr>
<td>Syncope</td>
<td>Head-up tilt test</td>
</tr>
</tbody>
</table>
## Conversion Disorder
### Distinctive Physical Findings

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesia</td>
<td>Map dermatomes</td>
</tr>
<tr>
<td>Hemianesthesia</td>
<td>Check midline</td>
</tr>
<tr>
<td>Astasia-abasia</td>
<td>Walking, dancing</td>
</tr>
<tr>
<td>Paralysis, paresis</td>
<td>Hand drop onto face</td>
</tr>
<tr>
<td></td>
<td>Hoover test</td>
</tr>
<tr>
<td></td>
<td>Check of motor strength</td>
</tr>
</tbody>
</table>

© Copyright
Conversion Disorder
Course and Prognosis

• Initial symptoms resolve within a few days to < a month in 90 to 100% (95% remit spontaneously, usually by 2 weeks)

• 75% have no further episodes, with 20-25% recurring within a year during periods of stress

• 25 to 50% present later with neurological disorders or nonpsychiatric medical conditions affecting the nervous system
Conversion Disorder
Course and Prognosis

• Predictors of good prognosis
  – Sudden onset
  – Easily identifiable stressor
  – Good premorbid adjustment
  – No comorbid psychiatric or medical disorders
  – No ongoing litigation
  – Short duration
  – Short interval between onset and initiation of treatment
  – Above average intelligence
  – Paralysis, aphonia, blindness (tremor and seizures-poor prognosis)
Conversion Disorder
Management/Treatment

• Acute cases
  – Reassurance/appropriate rehabilitation
    • Resolution usually spontaneous
  – Psychotherapy
    • A relative contraindication
Because patients with conversion disorder may be less open to psychological explanations than patients with defined neurological illness, the groundwork for a discussion of psychological and stress-related factors must be approached carefully.

- Do no inform the patient of the diagnosis on the first encounter.
- Reassure the patient that the symptoms are very real despite the lack of a definitive organic disease.
- Avoid giving the patient the impression that you feel there is nothing wrong with him or her.
- Provide socially acceptable examples of diseases that often are deemed stress-related (e.g., peptic ulcer disease, hypertension).
- Provide common examples of producing symptoms (e.g., queasy stomach when talking in front of an audience, heart racing with asking someone for a date).
- Provide examples of how the subconscious influences behavior (e.g., nail biting, pacing, foot tapping).
- Emphasize that the symptoms are potentially reversible (unlike many neurological diseases). Patients can be told that although their bodies are not functioning properly, improvement is possible because there is no structural damage.
- Explain that understanding and accepting the diagnosis often leads to improvement because it allows proper engagement with rehabilitation rather than being stuck wondering or worrying about what is wrong.
Conversion Disorder
Treatment

• Chronic cases
  – Aggressive therapy of comorbid psychiatric illness
  – Double bind approach to therapy
  – Pharmacotherapy
    • Anxiolytic or antidepressant medications?
    • Amobarbital interview?
  – Psychotherapy?
Conversion Disorder
Management/Treatment

• Psychotherapy
  – Insight-oriented supportive or behavior therapy
    • Relationship with a caring and confident therapist most important feature of the therapy
    • Confrontation re symptoms being imaginary detrimental
    • Suggestion of focus on stress and coping sometimes helpful for those resistant to idea of psychotherapy
  – Psychodynamic approaches
    • Exploring intrapsychic conflicts, and the symbolism of conversion symptoms ???
Conversion Disorder

- Is conversion disorder always distinguishable from neurological disorder.
- Diagnose conversion disorder with a lot of thought and caution.
- Are there specific stressors in Conversion Disorder.
- Is there a need for a temporal association.
Conversion Disorder

- Are risk factors enough or are there triggers.
- Child sexual abuse and childhood trauma.
- Epilepsy and conversion disorder.
- Conversion symptoms in psychiatry.
- Conversion in pediatric populations.
- Psycho-education of the family is a must.
- Feigning / Malingering and Conversion
THANK YOU

avinashdes888@gmail.com

Indian Journal of Mental Health
Annals of Indian Psychiatry
Writing Papers and Chapters etc..