Symptom Magnification
Somatoform Disorder
Malingering
AKA Hysteria / Embellishment / Psychologic Illness / Conversion Disorder

Learning Objective
› Understand early warning signs and implement early recognition of various “nonorganic components” which may be present in the evaluation and treatment of neuromusculoskeletal injuries

Learning Objective
› Understand how to manage and when to refer “psychosomatic / nonorganic pain syndromes”
### SOMATOFORM DISORDER
- Group of mental disorders in which physical symptoms suggest the presence of a medical disorder but are not fully explained by a general medical condition, the direct effects of a psychoactive substance, or another mental disorder.
- Symptoms are not under voluntary control.

### CONVERSION DISORDER
- An unconscious defense mechanism by which the anxiety that stems from intrapsychic conflict is altered and expressed in a symbolic physical symptom such as pain, paralysis, loss of sight, or some other manifestation that has no organic basis.

### HYSTERIA
- Psychological disorder whose symptoms include conversion of psychological stress into physical symptoms (somatization), selective amnesia, shallow volatile emotions, and overdramatic attention-seeking behavior.
- The term has controversial meaning as it was formerly regarded as a disease specific to women.

### MALINGERING
- Act of intentionally feigning or exaggerating physical or psychological symptoms for personal gain.
- Conscious Deception

### Nonorganic Signs Indicating Illness Behavior

<table>
<thead>
<tr>
<th>Sign</th>
<th>Normal</th>
<th>Abnormal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td></td>
<td>Anatomic Distribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dermatomal</td>
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<tr>
<td></td>
<td></td>
<td>Stocking / Glove</td>
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<tr>
<td>Numbness</td>
<td>Normal</td>
<td>Dermatomal</td>
</tr>
<tr>
<td></td>
<td>Abnormal</td>
<td>Stocking / Glove</td>
</tr>
<tr>
<td>Weakness</td>
<td>Normal</td>
<td>Myotomal</td>
</tr>
<tr>
<td></td>
<td>Abnormal</td>
<td>Giveway Weakness in Entire Limb</td>
</tr>
<tr>
<td>Time Pattern</td>
<td>Normal</td>
<td>Varies with Time / Activity</td>
</tr>
<tr>
<td></td>
<td>Abnormal</td>
<td>Never Free From Pain</td>
</tr>
<tr>
<td>Response to Treatment</td>
<td>Normal</td>
<td>Variable Benefit</td>
</tr>
<tr>
<td></td>
<td>Abnormal</td>
<td>Intolerant / ER Visits</td>
</tr>
</tbody>
</table>
Pain
NORMAL

Numbness
NORMAL

Weakness
NORMAL
**Time Pattern**

**NORMAL**

**ABNORMAL**

**Response to Treatment**

**NORMAL**

**ABNORMAL**

**Specific Tests**

- Libman's Sign
- Magnuson's Test
- Mannkopf's Sign
- Waddell Signs
- Flip sign
- Burn's Bench Test
- Plantar Flexion Test
- Regional Anesthesia Test
- Romberg's Sign
<table>
<thead>
<tr>
<th>Test</th>
<th>Description</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Libman’s Test</td>
<td>Assesses Patient’s Pain Threshold</td>
<td>Apply gradually increasing pressure to mastoid process.</td>
</tr>
<tr>
<td>Magnuson’s</td>
<td>Test for Lower Back Pain</td>
<td>Patient points to site of pain, patient is distracted, examiner then assesses if pain location changes greater than 1-2 cm.</td>
</tr>
<tr>
<td>Mankopf’s Sign</td>
<td>Activates ANS “Flight or Fight” Mechanism</td>
<td>Examiner establishes resting pulse, applies mechanical pressure over painful area, should increase pain 10 bpm or more</td>
</tr>
</tbody>
</table>
Waddell's Signs

0-2 Waddell Signs is negative for nonorganic components

3-5 Waddell Signs positive for nonorganic components

What are Waddell Signs actually testing?

Waddell Signs as part of a physical exam

- Waddell signs are five physical tests, like testing a patient on the road to test if their low back, hands, etc.
- Positive Waddell signs do not correlate with musculoskeletal, cardiovascular, neurologic, psychological disorders, abnormal thyroid function, sexual dysfunction.
- They do not discriminate organic vs. non organic problems, but they are observed in many.
- They do predict poor treatment outcomes.
- There may be a real organic basis for positive signs.

Waddell signs as part of an IME

- The original five items for Waddell signs:
  1. Ectropion:
  2. Waddell's Sign:
  3. Waddell's Sign:
  4. Waddell's Sign:
  5. Waddell's Sign:

- An additional item is added:
  - The patient's "pain" is worsened by coughing, sneezing, or stretching.

- A combination of these items is often used in chronic pain patients.
Flip Sign

- Compare Supine SLR to Sitting SLR
- In my opinion, often misused by DME's.
  - Should be for radiating pain only, not localized lumbosacral pain.
  - Lumbopelvic region is "fixed" in seated position
  - Lumbopelvic region is "mobile" in supine position (Goldthwaite's)

Burn's Bench Test

- Procedure:
  - Patient kneels on bench and bends trunk forward attempting to touch fingers to the floor.
- Patients should be able to perform with sciatica, sacralization, spondylolisthesis, and compression fractures of vertebra.

Plantar Flexion Test

- Procedure:
  - Similar to Braggard's only plantar flexion is performed instead of Dorsiflexion.
Regional Anesthesia Test

› Procedure:
  - Define regional complaint of numbness and delineate where claimed numbness ceases.
  - With peripheral neuritis, upper border of anesthesia is "blurry" and different for each sensation tested, e.g., pain, touch, heat, and vibration.
  - All sensations terminating at same location suggests nonorganic basis.

Romberg's (AKA Station Test)

› Perform Romberg's
  - With organic sensory ataxia, patient will sway the body from the ankles.
  - Swaying from the hips, toward a wall to catch one's self in the "nick of time", suggests malingering.

Case Exercise

› 8 months post MVC
› Low back pain belt line distribution
› Left lower extremity pain
› MRI performed 2 weeks post MVC revealed annular tear L5-S1
› Prior 6 months chiropractic care
› Condition overall worse since MVC
› Exam:
  - Diffuse paresthesias and positive T11-B1
  - Motor weakness in left lower extremity
  - Calf atrophy
  - ROM diminished flexion and extension
  - Positive Trunk Tinel
  - Meralgia