The Urge to React : Obsessive Compulsive Disorder and Huntington's Disease

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Disclosure

 Dr. Barkenbus has had no personal or financial relationships with commercial interests relevant to this presentation during the past 12 months.



Obsessive Compulsive Disorder

- aka "OCD".
- OBSESSIONS are
- 1. Recurrent thoughts, impulses, or images experienced as intrusive, inappropriate, and causing marked distress.
- 2. The person attempts to ignore or suppress the experience with some other thought or action.
- 3. The person recognizes the obsessions are a product of his/her own mind.
- COMPULSIONS are
- 1. Repetitive behaviors or mental acts that the person feels driven to perform with the goal of reducing the obsessive anxiety.



Obsessive Compulsive Disorder

Obsessions

- Contamination
- Religious
- Aggressive
- Symmetry
- Sexual

Compulsions

- Washing
- Counting
- Checking
- Arranging



Obsessive Compulsive Disorder

- OCD has been associated with several neurological conditions with involvement of the basal ganglia/caudate region of the brain.
- Sydenham's Chorea
- Tourette's Syndrome
- Huntington's Disease
- Carbon Monoxide
- Anoxic Injury
- Stroke



Two Huntington's Patients with OCD

- 58 year old man with chorea x 5 years and cleaning compulsions.
 Waste immediately removed from the house. "Loomed" over wife when preparing foods and daughter when changing her child's diapers. Cleaned his and others dinner plates immediately after or during meals.
- 58 year old man with chorea x 6 years and smoking compulsions.
 5 packs of cigarettes/day smoked to the end with finger burns.
 Would not discard to enter a taxi or elevator (made family wait).
 Would empty bowel/bladder on himself rather than interrupt a cigarette.
- Both acknowledged repetitive thoughts (elaboration and introspection limited by dementia) and were hostile/belligerent when compulsions were disrupted.



OCD versus Obsessive Compulsive symptoms in HD

Huntington's Study Group of 1642 individuals with active disease.
 8.6% endorsed classic OCD.
 27.2% endorsed elements of OCD.

OC symptoms were associated with older age, longer duration of illness, poorer function, and higher rates of depression, suicidal ideation, aggression, and delusions.

OC symptoms were not related to motor or cognitive symptoms.

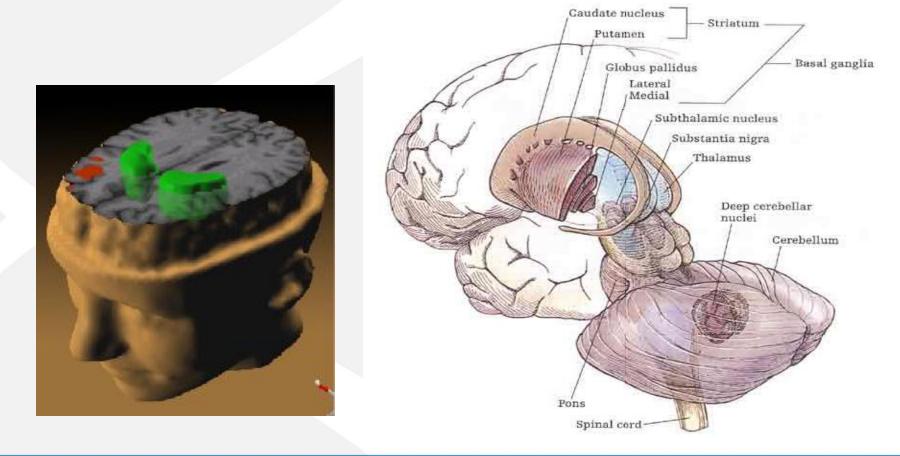


Perseveration / Fixation

- Common in the disabling stage of Huntington's Dementia
- Stereotypy = repetitive, non-purposeful actions that are more complex than tics and chorea but more simple than compulsive rituals.
 - -Physical: pacing, skin picking, hitting self and nearby objects.
 - -Verbal: repeated phrases, questions, words, vocalizations.



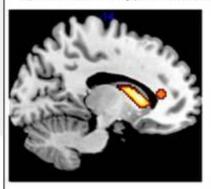
Relevant Brain Regions for Both OCD and HD show involvement of the Caudate, OrbitoFrontal Cortex, and Amygdala

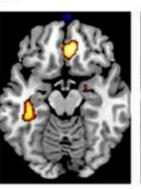


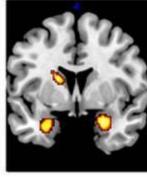


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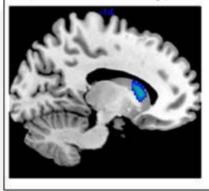
a) DisExePD hypometabolism

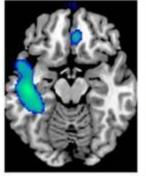


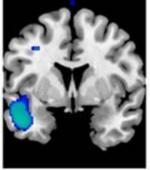




b) NonDisExePD hypometabolism











Treatment – Behavioral / Environmental

• Exposure and Response Prevention for standard OCD.

In HD, Cognitive Deficits and Impulsivity can limit understanding of this treatment and make it hard to build on previous success.

Sometimes perseverative behavior will "extinguish" over time.

If not, Family needs to understand that the individual cannot "be reasonable" and they should "pick their battles" by saving confrontations only for issues related to safety.



Treatment - Pharmacological

- Standard OCD responds to "antiobsessive" properties of Serotonin Selective Reuptake Inhibitors (aka SSRI antidepressants) though complete elimination of symptoms is uncommon.
- These are commonly used in the OC symptoms of HD.
- There are case reports of other agents such as amantadine, olanzapine, and trazodone.
- Sometimes vacation is better than medication.



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