



# Perseveration

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Huntington's Disease  
Society of America

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# Presenter disclosures

**Christopher A. Ross MD PD**

**The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**

**No relationships to disclose or list**

# Tongue twisters

- “Anosognosia”
- “Perseveration”

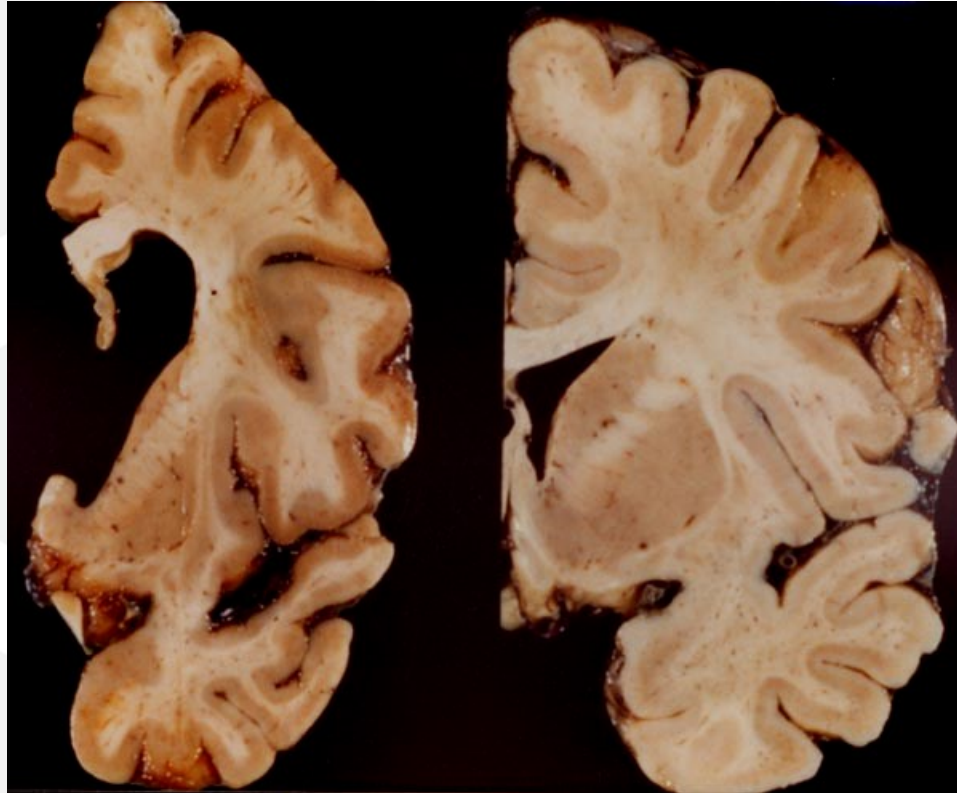
# Tongue twisters

- “Anosognosia:” “unawareness” or “lack of insight;” people with HD often do appreciate that they have, chorea, incoordination, cognitive or emotional change, or do not appreciate how severe they are
- “Perseveration:” “repetition” or “getting stuck;” people with HD often repeat questions or statements, or get “stuck” or “fixated” on certain topics or issues

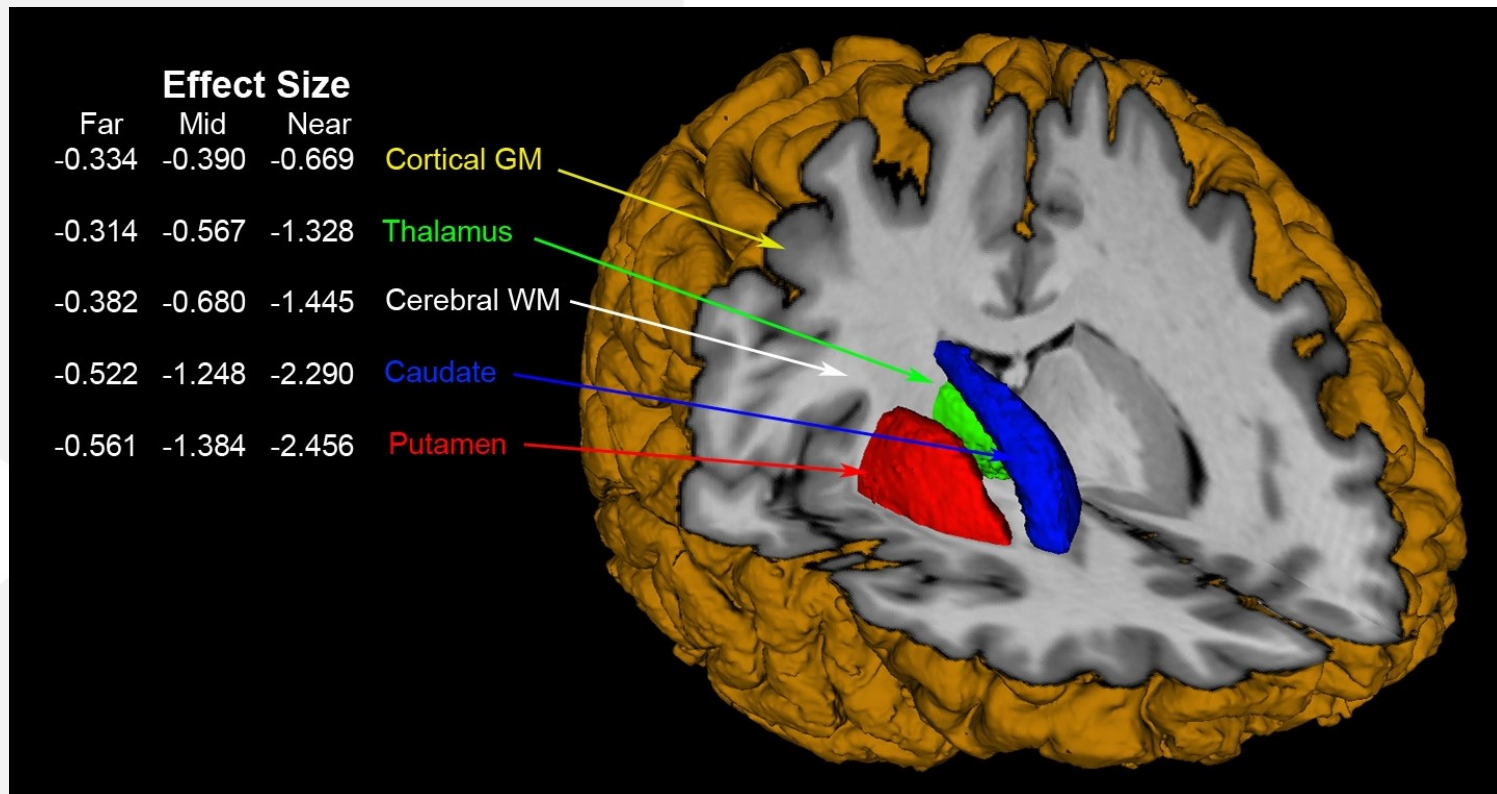
# Features of HD

- Motor disorders—progressive
- Cognitive disorders—progressive
- Psychiatric (“behavioral”/ emotional) disorders—variable
  - Unawareness and apathy
  - Depression and irritability
  - Perseveration and obsessions and compulsions
  - Disinhibition
  - Other: sexual, sleep etc etc

# Brain changes in HD: Neuropathology



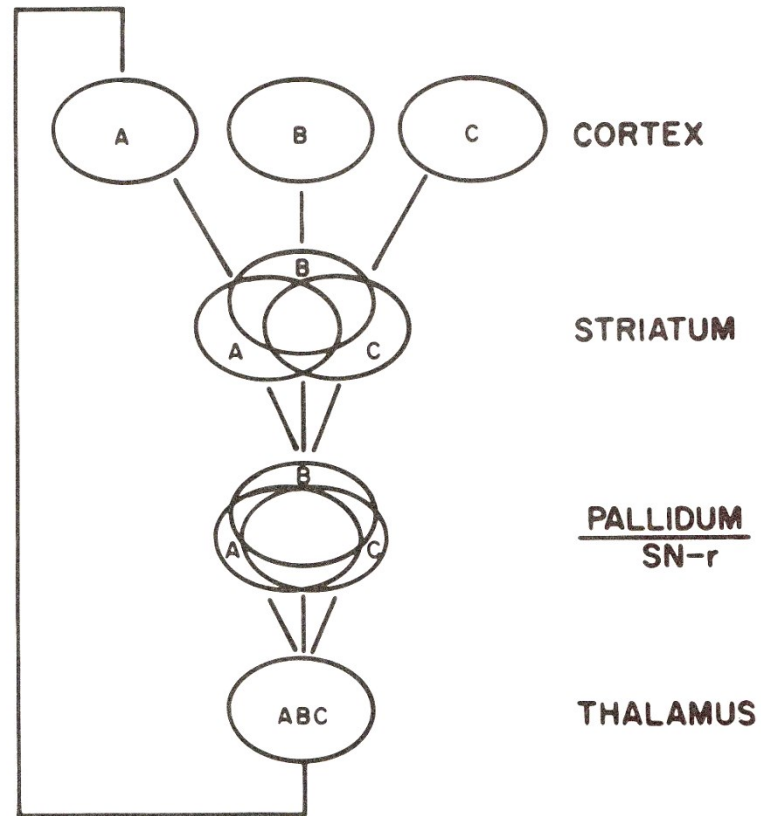
# Brain changes in HD



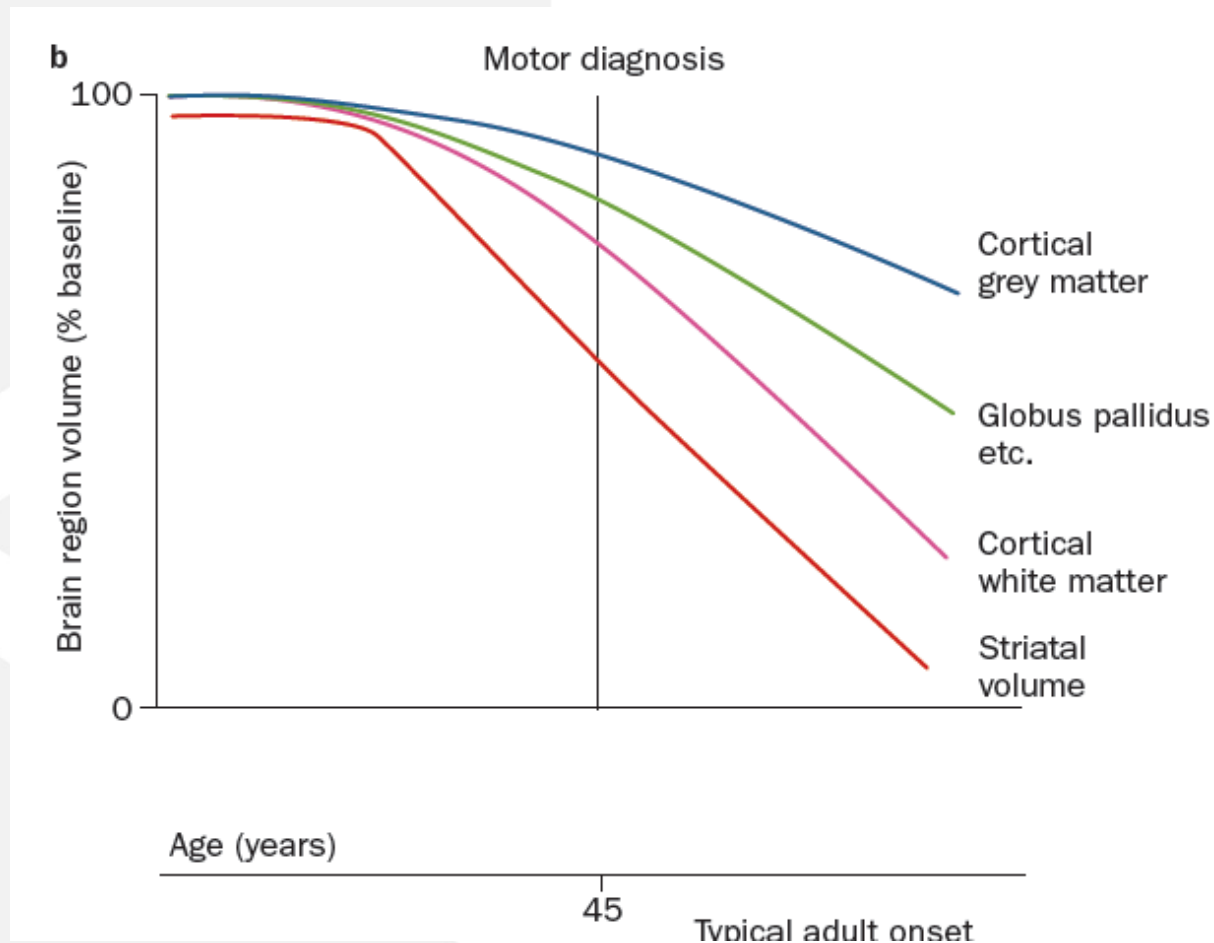
-Predict-HD Study



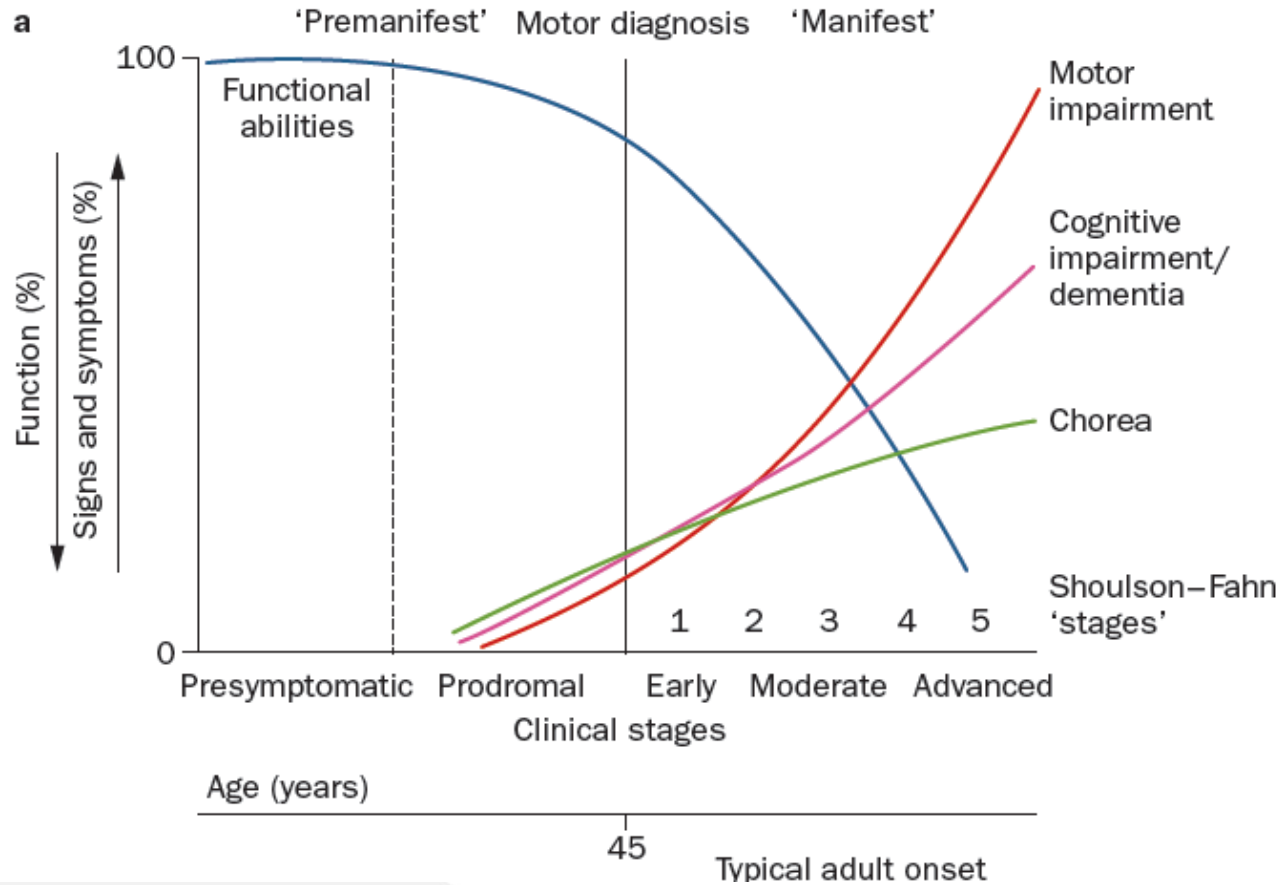
# Brain circuits affected in HD



# Progression of Brain Changes in HD



# Progression of HD



# Issues related to perseveration: obsessions and compulsions

- Obsessions are thoughts that recur that are unwanted, and that the person wishes not to think
- Compulsions are behaviors that recur that are unwanted, and that the person wishes not to do
- Examples: “obsessive tune” – common for nearly everyone, checking locks, handwashing etc

# Issues related to perseveration: obsessions and compulsions

- Obsessions and compulsions often need no treatment at all.
- When they become a problem, they are often very responsive to both behavioral treatment and medication (eg “Prozac” like drugs)

# Issues related to perseveration: tics and stereotypies

- Tics are repeated complex movements that are involuntary (like chorea but more complex repetitious)
- Stereotypies similar
- They may be vocal, eg a few words
- These are best seen as motor phenomena and can sometimes be treated with medications for chorea

# Issues related to perseveration: delusions

- Delusions are a more serious phenomenon
- A “delusion” is a fixed false idiosyncratic belief.
- Fixed—cannot be convinced otherwise
- False—not true
- Idiosyncratic—unique or unusual, not culturally sanctioned

# Issues related to perseveration: delusions

- Delusions are a more serious phenomenon
- Delusions are treatable with medication, and may require hospitalization



# Issues related to perseveration: “disinhibition”

- Individuals with HD may undergo a number of personality changes
- Disinhibition refers to emergence of behavior which would normally be seen to be socially inappropriate
- May be repetitious in that it is noticeable when it happens

# Issues related to perseveration: depression

- Whenever someone's behavior changes, consider the possibility of depression
- Clinical depression—persistent sad (or irritable) mood, loss of interest in usual activities, and usually with changes in thinking about oneself or others
- Can unusually be treated effectively with medication and psychotherapy

# Issues related to perseveration: memory difficulties

- An individual with HD may repeat a question or comment, forgetting that the issue has already been addressed

# Coping with perseveration

- Perseveration is not common at some stages of the illness for many people with HD
- Remember that this is often a consequence of the disease: the individual with HD is not getting “stuck” on things deliberately or to be annoying
- The individual with HD often is not aware of being “stuck” on things (“anosognosia”)

# Coping with perseveration

- Every example is unique....but:
- It may be difficult to get individuals with HD to change their behavior....
- It is usually easier for the others around the person with HD to change....and learn to accept that this is just part of HD
- It is important to “pick your battles”

# Coping with perseveration, and other behavioral issues in HD

- It usually helps to have a predictable routine from day to day
- If something is going to change, plenty of advance notice (and repetitions) can be helpful
- A “low stress” environment is helpful for everyone....

# Coping with perseveration, and other behavioral issues in HD

- Avoid arguments
- Avoid contradictions
- Use redirection
- Offer a choice

# Coping with perseveration, and other behavioral issues in HD

- Often a psychiatrist, social worker, psychologist, or other professional can help.....
- If all else fails, keep in mind that HD is not static; a problem behavior will often resolve on its own.











# Unawareness/ “Anosognosia”

- “Anosognosia” from Ancient Greek a-, "without", nosos, "disease" and gnōsis, "knowledge."
- Present in many neuropsychiatric conditions, eg Alzheimer's disease, stroke, schizophrenia
- Anosognosia may be caused by dysfunction in the cortex of the brain (the “parietal region) on the right side

