



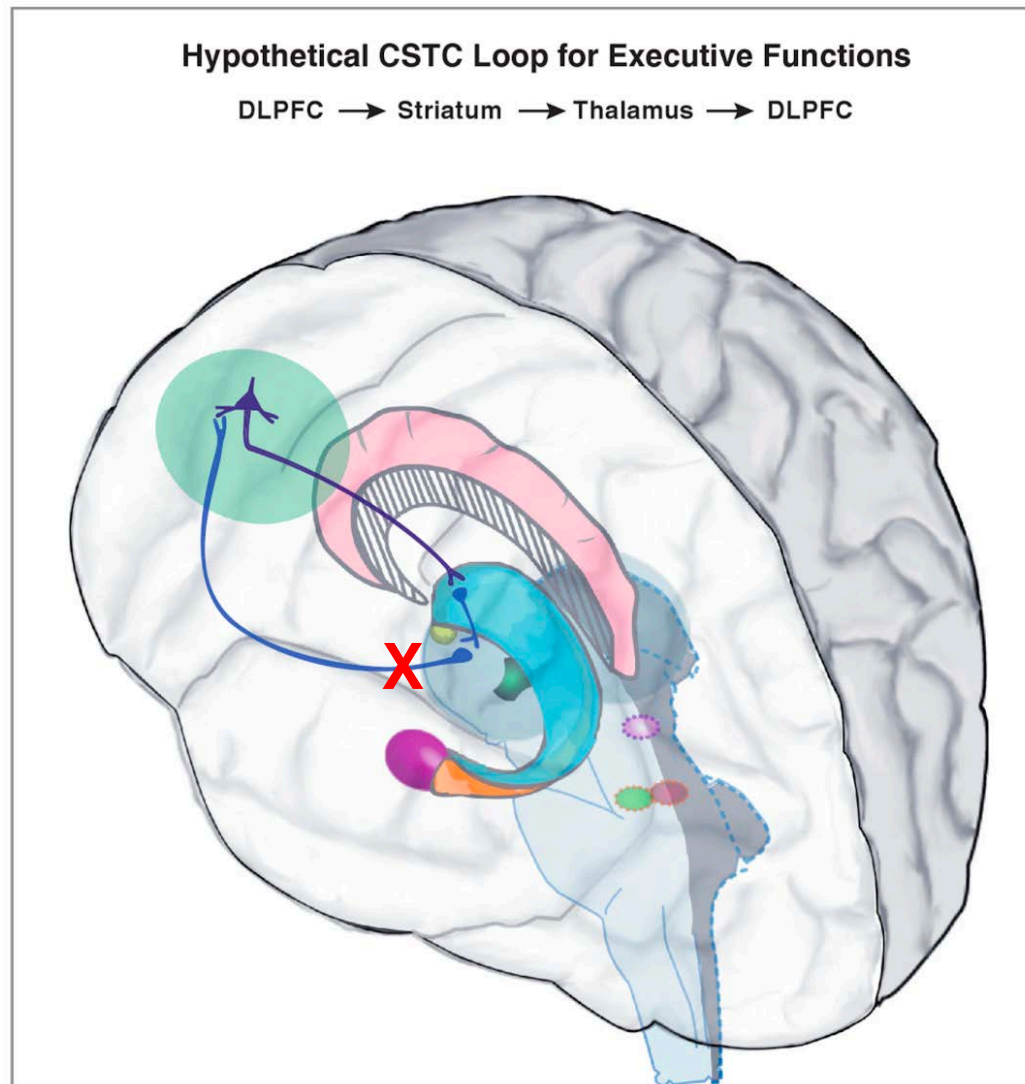
Deep Brain Stimulation and Focused Ultrasound for OCD

Mahendra T. Bhati, M.D.
Chief of Interventional Neuropsychiatry
Clinical Associate Professor of Psychiatry and Neurosurgery
Stanford University School of Medicine

Neurosurgery for OCD:

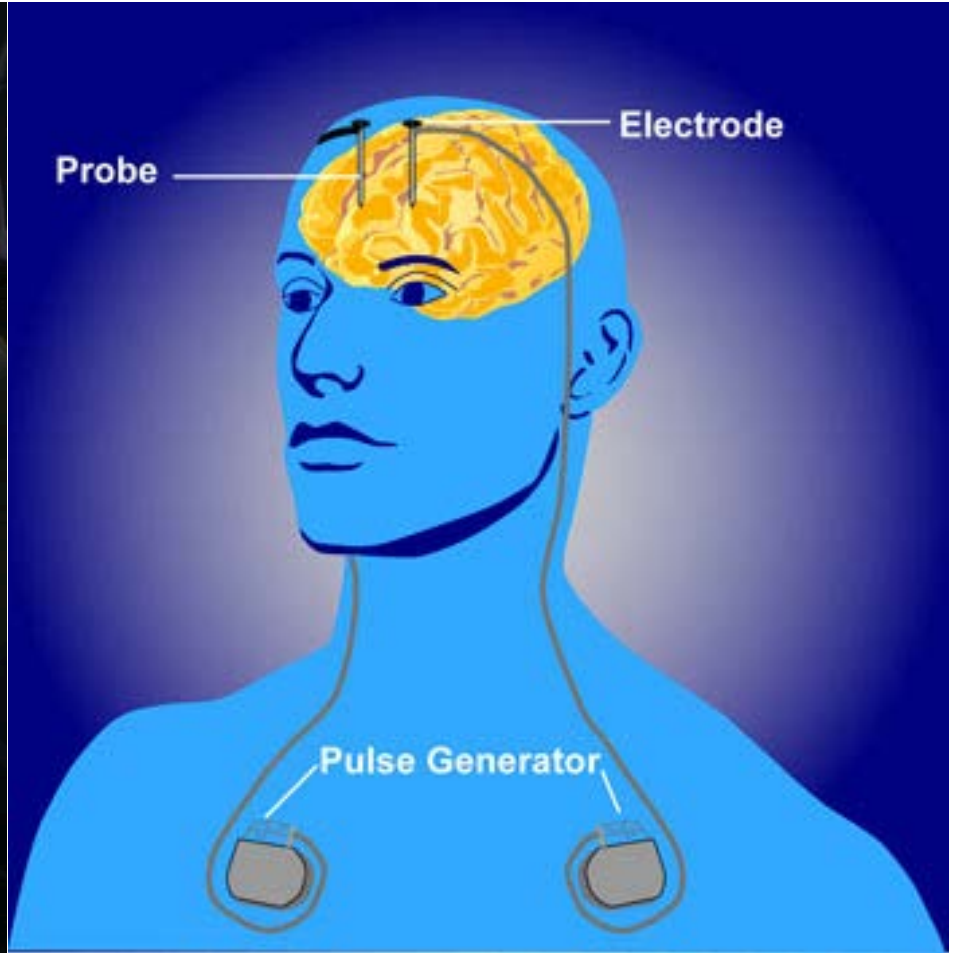
- 10-40% of OCD patients are treatment-refractory.
- Neurosurgical interventions such as the capsulotomy have been used since the 1950's for OCD.
- Capsulotomy associated with 50% reduction in OCD symptoms.
- DBS associated with approximately 40% reduction in symptoms in half of patients.
- 2008: DBS of the ventral capsule/ventral striatum (VC/VS) approved by FDA under a Humanitarian Device Exemption for OCD.
- Targets: VC/VS, anterior limb of the internal capsule, cingulate gyrus, nucleus accumbens, etc.

Disrupted circuitry in OCD:

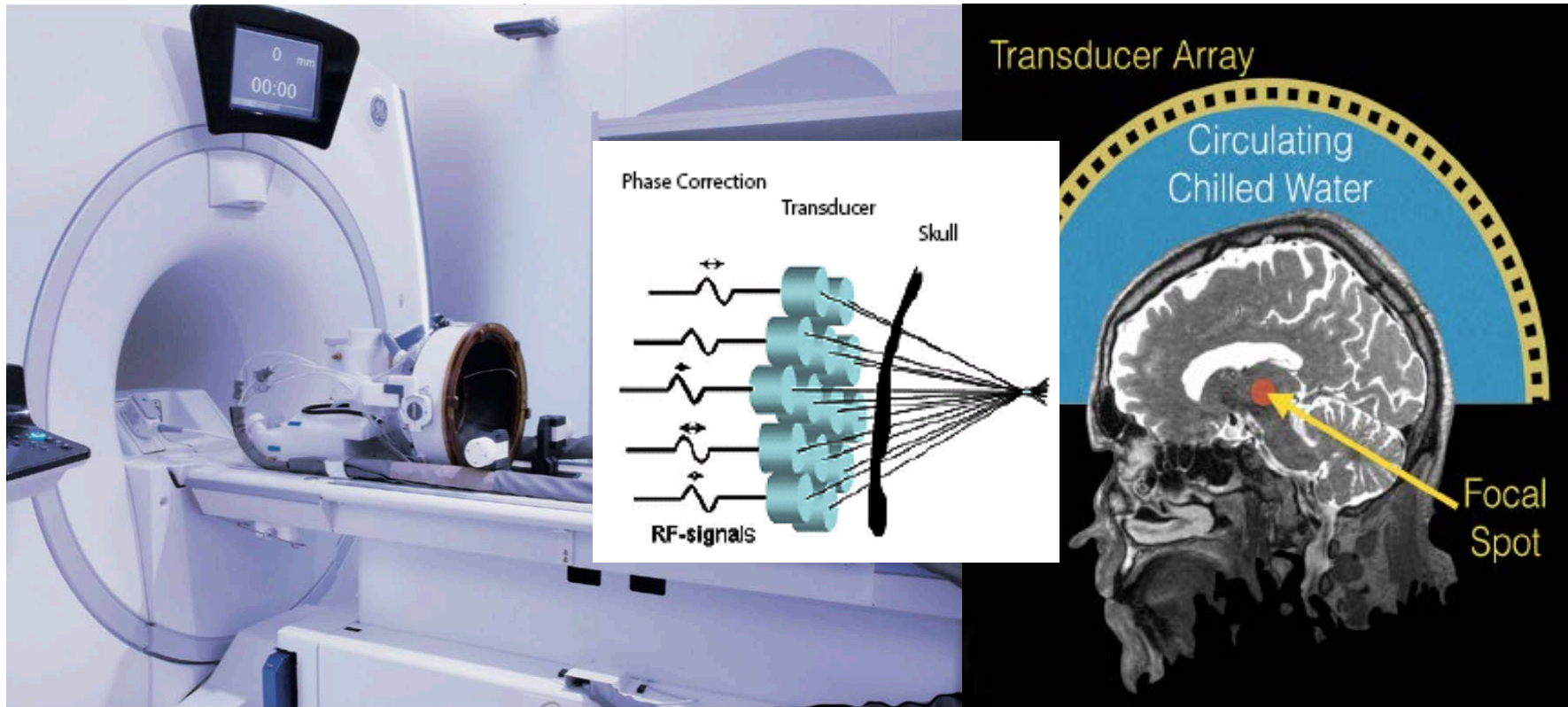


From Stahl, 2008

Deep Brain Stimulation (DBS):

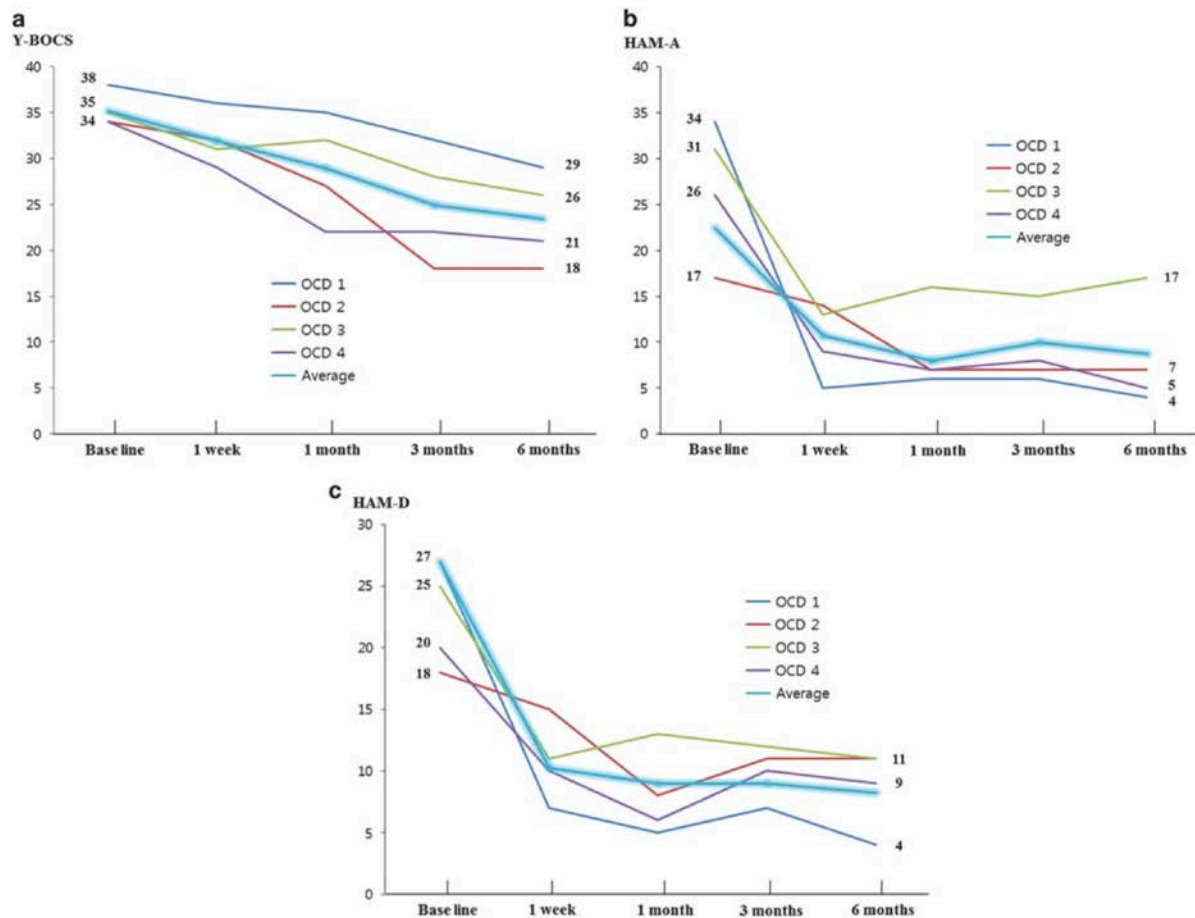


Focused Ultrasound (FUS):



Focused Ultrasound (FUS):

FUS reduced OCD symptoms and anxiety plus improved mood.



Questions:

mbhati@stanford.edu