

# Etiology of OCD

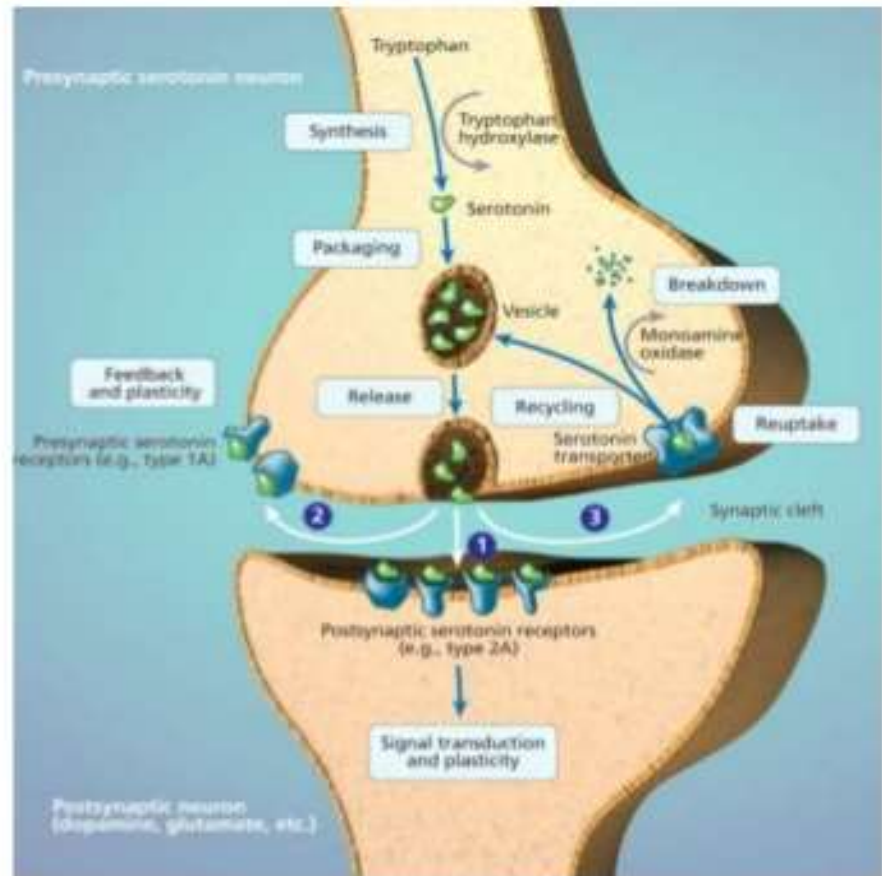


## Etiology

- Biological factors
- Behavioural factors
- Psychological factors

# Neurotransmitters

- SEROTONIN
  - ❖ Dysregulation of serotonin
  - ❖ Abnormality of the serotonergic system and particularly the hypersensitivity of postsynaptic 5-HT receptors





- NORADRENALINE

- ❖ Clonidine lowers the amount of norepinephrine released from the presynaptic nerve terminals.

- DOPAMINE

- ❖ Presence of OCD symptoms in Tourette's syndrome, Sydenham's chorea and postencephalitic parkinsonism



# Genetics

- High concordance rate among monozygotic twins
- First degree relatives – 5 to 7%



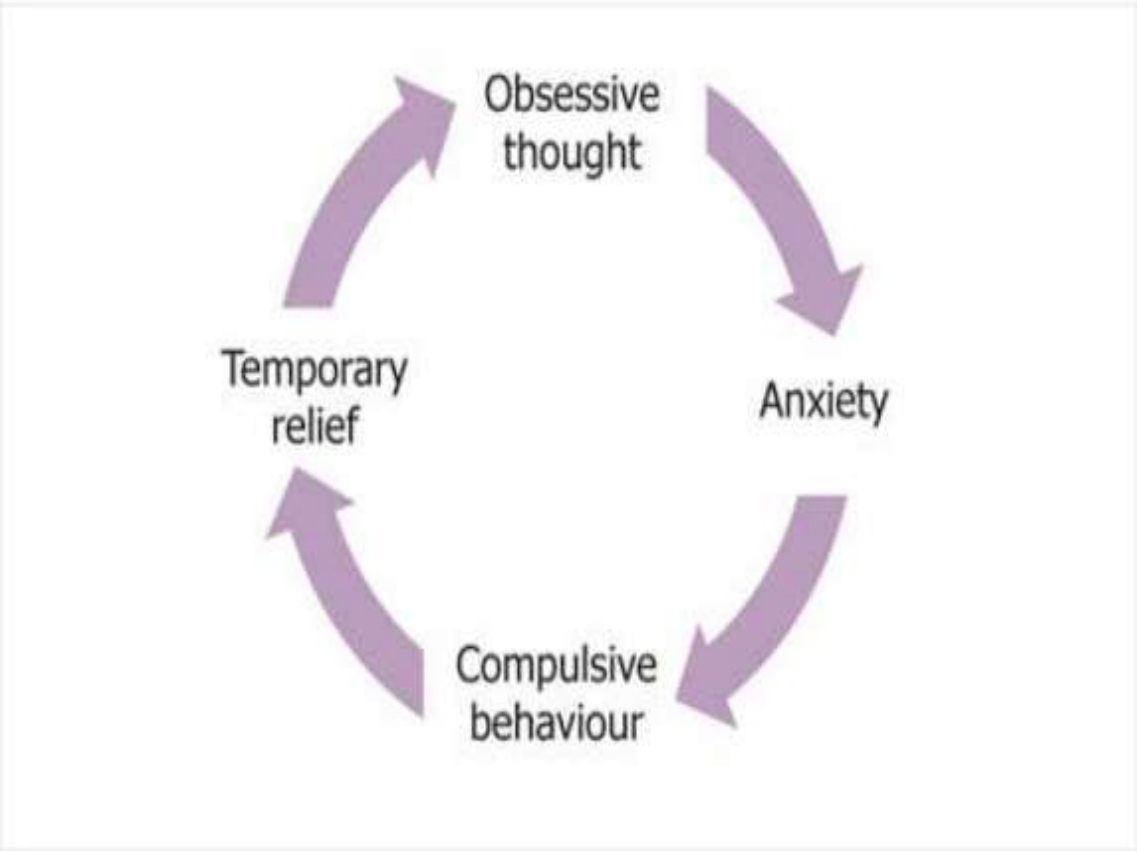
# Brain imaging studies

- PET scan – Increased activity in frontal lobes, basal ganglia and cingulum
- CT and MRI studies – Decreased sizes of caudate bilaterally
- EEG abnormality marked over temporal lobes



# Behavioural factors

- Obsessions considered as conditioned stimuli
- When a relatively neutral stimulus is coupled with an anxiety – provoking stimulus, through conditioning, it will produce anxiety even when presented alone.
- Compulsions are learnt as a way to reduce anxiety.
- Once relief of anxiety is produced, the relief serves as reinforce to the compulsion, which are then being repeated by the patient.





# Psychological factors

- Sigmund Freud – Obsessional neurosis
- Obsessive symptoms result from unconscious impulses of an aggressive or sexual nature.
- These impulses cause extreme anxiety, which is avoided by the defence mechanisms.

## Early childhood

Disturbed development in

Anal sadistic phase

Normally disguised in

Fixation in development

Reaction Formation

Obsessional personality traits

Anxiety related to oedipal conflicts

Regression

Reinforcement of Anal/Aggressive impulses

**At present**

In presence of fixation at anal sadistic phase

New defences

Isolation of affect

Undoing

Displacement

Obsessive thoughts

Compulsive acts

Phobias

Thank U