

## Biological treatments of OCD

### Selective serotonin reuptake inhibitors (SSRI)

SSRI's can assist in reducing specific factors in OCD, such as severe anxiety, by 'taking the edge' off and making it easier for patients to cope. OCD. According to the biological explanation of OCD, the condition is the result of low levels of an individual's serotonin in the brain. SSRIs (selective serotonin re-uptake inhibitors) are one type of anti-depressant drug, which include drugs such as Prozac.

SSRI's work by the following steps:

- When serotonin is released from the pre-synaptic cell into the synapse, it travels to the receptor sites on the post-synaptic neuron.
- Serotonin which is not absorbed into the post-synaptic neuron is reabsorbed into the sending cell (the pre-synaptic neuron).
- SSRIs increase the level of serotonin available in the synapse by preventing it from being reabsorbed into the sending cell. This increases level of serotonin in the synapse and results in more serotonin being received by the receiving cell (post-synaptic neuron).

### Evaluation of biological treatments for OCD:

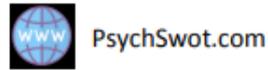
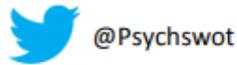
- Proven research support which found SSRI's were more effective than placebos. Soomro et al. (2008) conducted a review of the research examining the effectiveness of SSRIs and found that SSRIs were more effective than placebos in the treatment of OCD in 17 different trials. This supports the use of biological treatments for OCD, especially SSRI's.
- Cost effectiveness of biological treatments, including anti-depressants and anti-anxiety drugs, when compared to other treatments, like cognitive behavioural therapy. Drugs have thus become a popular choice for professionals, as their effectiveness is cheap and quick.
- Drugs, like SSRI's, only target the symptoms of OCD, like anxiety, and don't treat the actual condition. When patients come off SSRI's, OCD can return, showing that other treatments may prove more successful for long-term treatment.
- Patients may also experience side effects, like they can expect with any drug. Side effects of SSRI's can include headaches, dizziness, insomnia, blurred vision and nervousness or restlessness.

### Selective noradrenaline reuptake inhibitors (SNRI)

Similar in side effects, effectiveness and how they work, the dual serotonin-norepinephrine reuptake inhibitor antidepressants (SNRIs) venlafaxine (Effexor) and duloxetine (Cymbalta) may also have efficacy in OCD. However, these drugs have better safety and tolerability profiles compared to those of the SSRIs.

### Tricyclics

Clomipramine hydrochloride, a tricyclic drug, is a widely used antidepressant that can help with OCD and that has been approved in the US. Its primary action, like other antidepressants, is blockage of the reuptake of the neurotransmitter serotonin – it is a reuptake inhibitor. The adverse effects of clomipramine is similar to other tricyclic antidepressants, with side effects including: lack of sexual desire, insomnia and restlessness among the wide range.



### One other method of treating OCD (such as Electric Shock Therapy)

ECT (Electroconvulsive Therapy) is a treatment that involves sending an electric current through the brain to trigger an epileptic seizure to relieve the symptoms of mental health conditions.

The treatment is given under a general anaesthetic and using muscle relaxants, so that your muscles only twitch slightly, and your body does not convulse during the seizure. ECT can be used on conditions like severe, life-threatening depression as well as OCD, and can be particularly effective if the individual has not responded to medication or talking treatments. From the limited clinical studies available, ECT seems to have removed obtrusive thoughts in some individuals, but patients still need to continue taking medications after they complete ECT. Unlike drugs, shock therapy is a lot more invasive, and there are many unanswered questions as to why this appears to treat so many conditions. However, some side effects, like memory loss, can be present once an individual has completed ECT.