

## Some Neurobiological Effects of Psychiatric Treatment: Therapy vs. Medication/Devices

	Treatment	Effect
<b>Major Depressive Disorder</b>		
	Cognitive behavioral therapy	Decreased activity in frontal cortex and increase in limbic region (Goldapple et al.; Kennedy et al.)
	Paroxetine (Paxil)	Increased activity in frontal cortex and decrease in limbic region (Goldapple et al.)
	Venlafaxine (Effexor)	Decreased activity in frontal lobe and variable in limbic region (Kennedy et al.)
	Deep brain stimulation	Decreased activity in Brodman Area 25 (subgenual cingulate gyrus) (Lozano et al.)
<b>Obsessive Compulsive Disorder</b>		
	Fluoxetine (Prozac)	Decreased activity in anterior cingulate, thalamus, and caudate (Baxter et al.)
	Behavioral therapy	Same as above
<b>Social Phobia</b>		
	Cognitive behavioral group therapy	Decreased activity in amygdala-hippocampal regions (Furmark et al.)
	Citalopram (Celexa)	Same as above
See text for full references		

**Source:** *TCPR, Volume 8, Issue 9, September 2010, The Neuroscience of Psychotherapy*