Obsessive-compulsive disorder (OCD) is a psychiatric disorder in which affected people are obsessed with thoughts, ideas, feelings, behaviors and sensations. These obsessions motivate OCD patients to do something for the sake of eliminating such obsessions (compulsions). Symptoms

People diagnosed with OCD have repeated thoughts about many things. The most common thoughts include fear of dirt, germs or intruders. Violence, religious conflicts, sexual acts and other thoughts or images may also be experienced as obsessions. In their pursuit to reduce the obsessions and lower their anxiety levels, OCD patients perform rituals again and again, also known as compulsions. For instance, if the repeated thoughts are about fear of dirt, the patient would wash his hands over and over, even until they redden and start to hurt. Fear of intruders would lead OCD patients to lock and unlock doors many times. These unwanted thoughts and behaviors are beyond the control of OCD patients. They spend at least one hour per day thinking about unwanted thoughts and doing rituals, which can cause significant waste of time and imbalance in their daily lives. They don’t experience any pleasure from succumbing to their obsessions and compulsions, but they do have a short moment of relief after performing their rituals.

Biological Basis

The fast-growing research on the biological basis of OCD shows that neurotransmitters, particularly serotonin, may result to this psychiatric illness. Many research studies also show that the frontal subcortical circuits in the prefrontal cortex of the brain are associated with OCD. For instance, a research by Kelly in 1980 implicated that injury of the cingulate gyrus (a part of such the circuits) can result to the reduction of OCD symptoms. This means that excessive activity in the circuits is a potent triggering factor to the emergence of OCD symptoms. Thus, the disruption in the circuitry may diminish the symptoms.

One of the most intriguing theories on the neurobiology of OCD was suggested by Gehring, Himle, and Nisenson in 2000. The theory states that compulsive and repetitive behaviors of OCD patients may result from error signals in the frontal subcortical circuitry. Affectively, these error signals manifest as “feelings of wrongness”. The error signals are generated when the circuitry identifies a disparity between the patient’s preferred states (internal and/or environmental) and the experienced ones.

Treatment

Patients who participated in clinical trials for OCD responded well with medications that influence serotonin levels. As of today, the recommended treatment for OCD includes selective serotonin re-uptake inhibitors or SSRIs. The SSRIs approved by the Food and Drug Administration include Prozac, Paxil, Zoloft and Celexa. Among the various psychotherapeutic strategies, cognitive behavioural therapy or CBT is found to be the most effective for OCD.