

## **Pathophysiology**

### **Andrew Davis - Alcohol Withdrawal**

- Chronic excessive use of alcohol disrupts the balance of activity of the neurotransmitters gamma-aminobutyric acid (GABA) and glutamate.

#### **Reference:**

Pathophysiology and Treatment of Alcohol Withdrawal Syndrome: A Review

Dana Bartlett, BSN, MSN, MA, CSPI

<https://nursece4less.com/Tests/Materials/N220CMaterials.pdf>

### **David Carter - Schizophrenia**

- an excess or a deficiency of neurotransmitters, including dopamine, serotonin, and glutamate. Other theories implicate aspartate, glycine, and gamma-aminobutyric acid (GABA) as part of the neurochemical imbalance of schizophrenia. Abnormal activity at dopamine receptor sites is thought to be associated with many of the symptoms of schizophrenia. Low dopamine levels within this pathway are thought to affect the extrapyramidal system, leading to motor symptoms. The mesolimbic pathway, extending from the ventral tegmental area (VTA) to limbic areas, may play a role in the positive symptoms of schizophrenia in the presence of excess dopamine. The mesocortical pathway extends from the VTA to the cortex. Negative symptoms and cognitive deficits in schizophrenia are thought to be caused by low mesocortical dopamine levels. A decrease or blockade of tuberoinfundibular dopamine results in elevated prolactin levels and, as a result, galactorrhea, amenorrhea, and reduced libido.

#### **Reference:**

Schizophrenia: Overview and Treatment Options

Krishna R. Patel, PharmD, RPh, Jessica Cherian, PharmD, RPh, Kunj Gohil, PharmD, RPh, and Dylan Atkinson

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4159061/>