

## MAJOR DEPRESSIVE DISORDER

Lujain Hamid, Filiptsova O.V.

Scientific supervisor: as. Luchko E.N.

National University of Pharmacy, Kharkiv, Ukraine

cute-lolo-caty@live.co.uk

**Introduction.** Major depressive disorder is a common and serious medical illness. Symptoms include: feeling sad or having a depressed mood; loss of interest or pleasure in activities once enjoyed; changes in appetite which causes weight loss or gain unrelated to dieting; insomnia; loss of energy or increased fatigue; increase in purposeless physical activity or slowed movements and speech; feeling worthless or guilty; difficulty thinking, concentrating or making decisions; thoughts of death/suicide.

**Aim.** The purpose of this work is to study the biological mechanisms of depression and possible ways of its treatment.

**Results and discussion.** After further research involving animal models have suggested that there are some functional abnormalities that can be detected in the brains of many patients with major depressive disorder. The front lobe and the limbic system which regulate emotions and in particular, responses to stress, showed abnormal change in activity, in addition to high concentration of the hormone cortisol which is controlled by the hypothalamus that communicates with mostly the front lobe and limbic system. The neurones also known as brain cells, neurones pass messages to each other through electrical impulses, the impulses pass along a part of the neuron called the axon. At the end of the axon the impulses cause the neuron to release chemical messages called neurotransmitters. These chemical messengers move across a tiny gap known as the synaptic gap and attached to another neuron. An example of these neurotransmitters is serotonin, which is secreted by the raphe nuclei, helps regulate mood, emotions and other body functions. After the serotonin has done its job, it is reabsorbed by the neuron to be reused for the next nerve signal, people with depression may have a serotonin imbalance, their overall level of serotonin may be low and some of it may be reabsorbed too soon as a result communication between parts of the brain is impaired. Other neurotransmitters that help regulate emotions are dopamine and norepinephrine.

**Conclusions.** Treatments commonly include antidepressants such as selective serotonin reuptake inhibitors (SSRIs), serotonin norepinephrine reuptake inhibitors (SNRIs), serotonin-dopamine reuptake inhibitors (SDRIs), norepinephrine-dopamine reuptake inhibitors (NDRIs), which help regulate the movement of neurotransmitters and keep them in balance.

## ACQUIRED IMMUNE DEFICIENCY SYNDROME

Malhi I., Luchko E.N., Naboka O.I.

Scientific supervisor: prof. Filiptsova O.V.

National University of Pharmacy, Kharkiv, Ukraine

Imanemalhi1@gmail.com

**Introduction.** The incurable diseases are the conditions where no treatment can completely fight against the illness and make end of suffering. Some of this diseases can be treated medically and reduce from the pain and symptoms.

The causes of this last can change from illness to another, it depends on the virus or the inflammation and its location, but the main cause is the majority of incurable viruses change and adapt quickly so if scientists develop a cure for one form of the virus it will not be effective for another form specially because it changes very quickly.

Some of the dangerous incurable diseases are the one transmitted sexually.

At first what are the diseases sexually transmitted?

They are the infection which can be transmitted from person to another due to sexual contact, it might be caused by viruses or bacteria or some parasites. AIDS/HIV, genital warts, cytomegalovirus, human papilloma virus «HPV».