

ABSTRACT

This bachelor thesis is focused on neurobiology of anxiety and is supported by corresponding literature search. In the thesis individual anxiety disorders are described together with selected risk factors important for the development of this disease.

It also deals with biological hypotheses involving various changes in neurotransmitter systems and the influence of stress.

Furthermore, it deals with fear conditioning, extinction of fear response and overgeneralization, all of which are forms of fear learning.

Amygdala represents an important brain center of anxiety, consequently a description of its function along with amygdalar circuits are included in this thesis and different functions of other brain parts are described as well.

Moreover, this thesis is concerned with hypothalamic-pituitary-adrenocortical axis and the influence of individual hormones on anxiety.

Lastly, the role of the neuropeptide oxytocin and current studies regarding possibility of its use in therapy are presented.

Key words: amygdala, anxiety disorders, corticotrophin releasing hormone, fear, circuits of anxiety and fear, hypothalamic-pituitary-adrenocortical axis, oxytocin, stress