

Summary

Anorexia Nervosa (AN) and Bulimia Nervosa (BN) are diseases with considerable individual variation. Genetic background plays an important role in disease susceptibility and severity. To evaluate the relationship between certain genetic loci and diseases subtypes we genotyped and analysed evolution of selected clinical parameters. We investigated a group of 75 patients with AN (1. study), 127 DSM-4 and ICD-10 diagnosed patients with AN and BN (2. study), and contributed to sample of 2907 AN patients in large GWAS study. Results from the 1st study support association of polymorphism -1438G/A in serotonin receptor 5-HT_{2A} with AN and compare the results from other studies with metaanalyses. In next, polymorphism responsible for the serotonin neurotransmission (serotonin transporter 5-HTT, polymorphisms LPR and VNTR) the study shows different association trend of LPR with AN in Czech population compared to other studies. 5-HTT VNTR polymorphism had no observed association. The second study investigated the role of hemeoxygenase 1 (plays a pivotal role in metabolic stress protecting cells) in eating disorders, in interaction with enviromental stress. We investigated the usefulness of an aggregate measure of the risks of AN and BN that is based on genetic susceptibility loci and the added effect of environmental stress risk factors.

Key words

Anorexia and Bulimia Nervosa – Genotypization – Endofenotypes – Enviromental Stress Factors - Serotonin – Heme oxygenase-1 – Association studies