

FAT TISSUE PEPTIDES DO NOT DIFFERENTIATE TWO TYPES OF ANOREXIA NERVOSA - THE PRELIMINARY STUDY

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The pathogenesis of Anorexia Nervosa (AN) is still not entirely understood. DSM-IV classification differentiates two AN types: the restricting type (AN-R) and the binge-eating/purging type (AN-BP). We investigated four young women suffered from AN (two with AN-R and two with AN-BP) and the other four were our control group who did not suffer from eating disorder. The oligonucleotide microarray method (HG-U133A, Affymetrix) was used to determine the expression profile of genes coding fat tissue protein. On the oligonucleotide microarray HG-U133A were analyzed 15 transcripts representing 9 fat tissue genes (leptin, resistin, tumor necrosis factor, adiponectin, angiotensinogen, interleukin 6, chemerin, visvatin and SERPINE 1), which are potentially involved in mechanism of food intake and energy balance.

The total RNA was extracted from peripheral blood mononuclears. The oligonucleotide microarray method analyzes genes expression by using the phenomenon of hybridization of single-thread RNA fragments with complementary DNA probes. The results were normalized using RMAExpress. The U Mann-Whitney test was used for statistical analysis. The $p < 0.05$ was accepted as the essential level of statistical significance. Statistical analysis was measured by using Statistica version 7.1 PL.

None of 15 transcripts coding fat tissue protein differentiate two type of AN: the restrictive type of AN and binge-eating type of AN ($p=0.7901$) and none of investigated transcripts differentiate either the restrictive type of AN and control group ($p=0.7001$) or binge-eating type of AN and control group ($p=0.8641$).

The fat tissue protein did not seem to be responsible for food intake.