EFFECT OF SUBCHRONIC ETHANOL TREATMENT ON PLASMA AND CEREBROSPINAL FLUID LEPTIN LEVELS IN RATS SELECTIVELY BRED FOR HIGH AND LOW ALCOHOL PREFERENCE

Przemys³aw Miko³ajczak, Irena Okulicz-Kozaryn, Ewa Kamiñska, Krzysztof Wiktorowicz, Kinga Leœniewska, Wanda Dyr, Wojciech Kostowski

Effect of subchronic ethanol treatment on plasma and cerebrospinal fluid leptin levels in rats selectively bred for high and low alcohol preference.


The effect of 5-week voluntary ethanol (EtOH) intake on plasma and cerebrospinal fluid (CSF) leptin levels was determined in adult male Warsaw high EtOH preferring (WHP) and low preferring (WLP) rats. EtOH treatment led to a decrease in leptin CSF concentration in WHP rats when compared to EtOH-naïve WHP and control Wistar rats. On the contrary, in EtOH-treated WLP rats, both plasma and CSF leptin levels were increased in comparison with EtOH-naïve animals. It can be concluded that EtOH treatment led to different response expressed especially by CSF leptin levels in WHP and WLP animals and it may be related to their genetic predisposition.

Key words: ethanol preferring, leptin, plasma, cerebrospinal fluid, male adult rats, EIA

correspondence; e-mail: aspm@usoms.poznan.pl