

pojawiły się takie objawy zespołu, jak piloerekcja, sztywność mięśniowa, wrażliwość na bodźce zewnętrzne.

Słowa kluczowe: szczury WHP i WLP, picie alkoholu, zespół abstynencyjny, poziom alkoholu we krwi.

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A new line of Wistar rats selected to preference for alcohol: behavioural characteristics

SUMMARY

Animal models make a valuable tool in the research on the nervous system and behaviour. They are used also to study the mechanism of alcohol dependence. In few laboratories only genetic rat lines manifesting marked preference for alcohol have been bred. Among the best known are the following ones: ALKO Alcohol/Nonalcohol (AA/NA), Alcohol Preferring/-Nonpreferring (P/NP), HAD/LAD (High-/Low-Alcohol Drinking), and sP/SNP (Sardinian Alcohol-Preferring/-Nonpreferring. Alcohol intake in P, HAD, AA and sP rats is considerable, amounting to over 5g/kg/24h.

In the laboratory of the Pharmacology Department, Institute of Psychiatry and Neurology in Warsaw two rat lines with genetic preference for alcohol have been bred: WHP (Warsaw High Preferring) and WLP (Warsaw Low Preferring). The former drink 5g/kg/24h or more alcohol while the latter drink less than 2g/kg/24h.

Alcohol consumption patterns per 24h were studied in the 15th, 16th and 17th generations of both these rat lines. In the 15th generation only 4.8% of WHP rats were found to drink alcohol in the 0 to 2g/kg/24h range, while in the WLP line as many as 57% of animals had alcohol intake in this range. A similar distribution was observed in generations 16th and 17th. In all the three generations the number of WLP rats with an increasing alcohol intake is obviously declining.

WHP rats as compared to WLP rats drink much more alcohol in nocturnal hours. However, blood alcohol level in the WHP and WLP lines turned out to be similar, which may indicate a different rate of alcohol metabolism in the two groups of animals.

WHP and WLP rats were assessed for the withdrawal syndrome after 14 and 36 hours of abstinence from alcohol. Such symptoms as piloerection, muscular rigidity, and sensitivity to external stimuli occurred in the WHP rats, but not in the WLP line animals.

Key words: WHP and WLP rats, alcohol drinking, withdrawal syndrome, blood alcohol level

PIŚMIENNICTWO

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