早稲田大学 人間科学学術院 人間科学会 諸費用補助成果報告書(Web 公開用)

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所属・資格(※学生は課程・	
学年を記載。卒業生・修了生は	博士後期課程4年
卒業・修了年月も記載)	
発表年月	2022 年 3月
または事業開催年月	2022 中 3万
発表学会・大会	第 99 回日本生理学会大会
または事業名・開催場所	第 55 回 1 本主程于云八云
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名も記載すること)	
発表題目(※学会発表の場	Two-weeks heat exposure alters the heat-escape behavior
合のみ記載)	and the possible involvement of the thermo-TRP channels

発表の概要と成果(抄録を公開している URL がある場合、「概要・成果」を記載した上で、URL を末尾に記してください。また、抄録 PDF は別途ご提出ください。なお、抄録 PDF は Web 上には公開されません。)

Introduction. We aimed to evaluate the heat-escape behavior in heat exposure mice and tested the hypothesis that the expression of TRPV1 channels affects the behavioral response. Methods. Male C57BL/6 mice (n=22; age, 7 w) were divided to heat exposure and control groups (HE and CON groups, respectively). They were individually housed for 2 w at 33°C and 25°C in the HE and CON groups, respectively. After the period, mice were assessed behavioral response with the cross-shaped system for 90 min, which consisted of five Peltier boards (10x10 cm) arranged in a cross. The temperature setting was that any one of 4 boards located in the end of the cross was 32°C and the others 38°C. The board set at 32°C was randomly changed every 5 min. Abdominal temperature (T_{abd}) and the ratio to the total at which mice stayed on the 32°C board were assessed (heat-escape behavior). Mice were killed by overdose anesthetics and the dorsal root ganglia was excised, and the protein expression of the TRPV1 and V4 were evaluated by immunohistochemistry and Western blotting. Results & Discussion. The ratio of 32°C selection was smaller in the HE than in the CON group (58 \pm 12 and 78 \pm 11%, respectively). The expression of the TRPV1 was smaller in the HA than in the CON group, but there were no differences in that of the TRPV4. These results may suggest that continuous heat exposure changes heat-escape behavior. Moreover, decreased expression of the TRPV1 channels may be involved in the mechanism in a part.