

中文題目：PPAR-r 作用劑對熱休克具有腎臟保護作用

英文題目：Renoprotective Effect of PPAR-r Receptor Stimulator in Diabetic Rats after Exposure to Heatshock

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前言：Experiments were carried out to ascertain whether the expression of leptin and peroxisome proliferator-activated receptor-gamma nuclear receptor (PPAR- r) involved renal damage in the heatstroke .We validated the hypothesis that PPAR-r receptor stimulator (Pioglitazone) may confer renal protection in diabetes against heatstroke-induced injury in diabetic rats by stimulating the expression of leptin and PPAR- r receptor .

材料及方法：To deal with matter, we assessed the effects of heatstroke on mean arterial pressure, heart rate, renal blood flow (RBF), total peripheral vascular resistance(TPR), colonic temperature, blood gases, and serum levels of leptin and tumor necrosis factor-alpha (TNF- α) in diabetic rats pretreated without and with Pioglitazone . In addition, heat shock protein (HSP) and injury markers expression in the kidney was determined in different groups.

結果和結論： Mean arterial pressure, RBF, blood pH, onset time of heatstroke and survival time after heat stress were all lower in diabetic rats. However, blood lactate concentrations, TPR, levels of leptin and TNF- α were greater in diabetics. Diabetic rats pretreated with Pioglitazone , when exposed to heat stress were longer onset and survival times, greater renal blood flow, higher leptin level and lower TNF- α level. After the onset of heatstroke, HSP and injury markers in the kidney were found to be significantly higher and lower, respectively in Pioglitazone pretreated diabetics. Thus, it appears that the observed benefit of PPAR- γ receptor stimulator is related to attenuation of tissue hypoperfusion and elevation of leptin and HSP expression during heatstroke in diabetic rats.