

メバロン酸二リン酸脱炭酸酵素の諸性質、
並びに正常血圧ラットと脳卒中易発症ラットとの比較

道原明宏

YAKUGAKU ZASSHI, 124 (10), 683-692 (2004).

**Comparison of Biochemical Properties and Protein Level
of Mevalonate Pyrophosphate Decarboxylase between Stroke-Prone
Spontaneously Hypertensive Rat and Wistar Kyoto Rat**

Akihiro Michihara

ABSTRACT : The spontaneously hypertensive rat (stroke-prone) (SHRSP) is rat that suffers from severe hypertension and cerebral hemorrhage. The serum cholesterol level of this rat is lower than that of normotensive Wistar Kyoto rat (WKY). Epidemiological studies have indicated a negative association between serum cholesterol level and the incidence of cerebral hemorrhage in human. Therefore, the low level of serum cholesterol in SHRSP may cause the cerebral stroke in this rat. The following investigation demonstrated that the activity for biosynthesis of cholesterol was decreased in SHRSP due to the reduced activity of mevalonate pyrophosphate decarboxylase (MPD). However, the mechanism underlying the reduced activity of this enzyme remains unclear. In this review, we indicate that an amount of MPD in the brain and liver of SHRSP is reduced from the age of two weeks.

抄録 脳卒中易発症ラットの血清コレステロール低下は、肝と脳におけるメバロン酸二リン酸脱炭酸酵素のタンパク量低下に起因していることを明らかにした。(平成15年度日本薬学会中国四国支部奨励賞の受賞を記念して記述したものである)