

Title	Possible involvement of an impaired baroreflex mechanism but not the renin-angiotensin system and vasopressin in the enhanced pressor responsiveness to physostigmine in spontaneously hypertensive rats
Sub Title	
Author	川島, 紘一郎(Kawashima, Koichiro) 三輪, 裕子(Miwa, Yuko) 藤本, 和子(Fujimoto, Kazuko)
Publisher	共立薬科大学
Publication year	1987
Jtitle	共立薬科大学研究年報 (The annual report of the Kyoritsu College of Pharmacy). No.32 (1987. ) ,p.69- 69
JaLC DOI	
Abstract	
Notes	抄録
Genre	Technical Report
URL	<a href="https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000032-0069">https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000032-0069</a>

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

**Possible Involvement of an Impaired Baroreflex Mechanism but not the Renin-Angiotensin System and Vasopressin in the Enhanced Pressor Responsiveness to Physostigmine in Spontaneously Hypertensive Rats**

Koichiro KAWASHIMA, Yuko MIWA and Kazuko FUJIMOTO

川島紘一郎, 三輪裕子, 藤本和子

1. Effects of physostigmine on heart rate, mean arterial pressure (MAP), plasma renin concentration (PRC) and vasopressin (AVP) release were investigated in spontaneously hypertensive (SHR) and Wistar-Kyoto (WKY) rats.
2. Physostigmine (100  $\mu$ g/kg, i.a.) produced a greater and prolonged hypertensive response in the SHR than in the WKY.
3. Heart rate was increased by physostigmine in SHR rats while it was unchanged in the WKY.
4. PRC was unchanged or even slightly decreased in these animals when MAP was increased by physostigmine.
5. An AVP pressor antagonist did not attenuate the pressor and cardiac effects of physostigmine in these animals.
6. These data indicate that an impaired baroreflex mechanism or a different mode of sympathetic neuronal activation by physostigmine through the central mechanism appears to be contributory, at least in part, to the enhanced pressor responsiveness in the SHR.
7. The renin-angiotensin system and AVP do not appear to be involved in the enhanced pressor responsiveness to physostigmine in SHR rats.