

ICI World of Journals (/search/form) / Journal of Krishna Institute of Medical Sciences Univer... (/search/details?id=31780)  
 / 2020; 9 (02) (/search/journal/issue?issuelid=228358&journalid=31780) / **Effect of L/N-type Calcium Channel Blocker (Cilnidipine...**

[◀ Back](#)



**Journal title:**

Journal of Krishna Institute of Medical Sciences University (/search/details?id=31780)

**ISSN:**

2231-4261 (online)

**GICID:**

*n/d*

**Country / Language:**

IN / EN

**Publisher:**

Registrar Krishna Institute of Medical Sciences University Karad

Citation:	<b>20</b>	ICV 2019:	<b>E/P</b> .....
MNISW 2019:	<b>20</b>	ICV 2018:	<b>120.59</b>

Deposited publications: 877 > Full text: 99% | Abstract: 63% | Keywords: 67% | References: 0%

As part of our website we use cookies to provide you with services at the highest level , including in a manner tailored to individual needs . Using the site without changing the settings for cookies results in saving them in your device . You can change cookies' settings any time you want in your web browser. More details in our Cookies Policy

Got it!

# Effect of L/N-type Calcium Channel Blocker (Cilnidipine) on Oxidative Stress in Nitric Oxide-deficient Hypertensive Rats

👤 Gouher B. Shaikh (/article/search?authors=Gouher B. Shaikh)<sup>1</sup>, Surekha Hippargi (/article/search?authors=Surekha Hippargi)<sup>2</sup>, Dewan S.A. Majid (/article/search?authors=Dewan S.A. Majid)<sup>3</sup>, M.S. Biradar (/article/search?authors=M.S. Biradar)<sup>4</sup>, Kusal K. Das (/article/search?authors=Kusal K. Das)<sup>1</sup>

- 🏢 1. Laboratory of Vascular Physiology and Medicine, Department of Physiology, Shri B.M. Patil Medical College, Hospital and Research Centre, BLDE (Deemed to be University), Vijayapura-586103 (Karnataka) India ,  
 2. Department of Pathology, Shri B.M. Patil Medical College, Hospital and Research Centre, BLDE (Deemed to be University), Vijayapura-586103 (Karnataka) India ,  
 3. Tulane University School of Medicine, New Orleans, USA ,  
 4. Department of Medicine, Shri B.M. Patil Medical College, Hospital and Research Centre, BLDE (Deemed to be University), Vijayapura-586103 (Karnataka) India

📄 FJKIMSU 2020; 9 (02) : 73-80; Language: EN

## Abstract

Background: The sympathetic nervous system plays a major role on the renal function through the vasoactive system and the renin-angiotensin aldosterone system. Even though interest in the renal protective effects of sympathetic blocker has been increased, there are not much data to clarify this efficiency in nitric oxide deficient hypertensive rats. Aim and Objectives: To find out the effect of cilnidipine, L/N-type calcium channel blocker on oxidative stress of kidney in Nitric Oxide Synthase (NOS) inhibited experimental hypertensive rats. Material and Methods: Male Albino Wistar rats (n24) were randomly allocated into four groups: Group 1 control received vehicle; Group 2 received Cilnidipine; G Group 3 received N -nitro-L-Arginine Methyl Ester (NAME) hydrochloride; Group 4 received L-NAME and Cilnidipine; All drugs are given orally for 4 weeks. Blood pressure was measured before and after intervention and twice during intervention for all the th rats. On 29 day, blood was collected and animals were sacrificed and kidneys were collected. Serum and kidney tissue Malondialdehyde (MDA) levels are estimated. Results: The results demonstrate that there is a significant increase in Mean Arterial Pressure (MAP) in L-NAME treated rats compared to control group. Treatment with cilnidipine significantly decreases the MAP in Group 4 rats. We also demonstrated the significant elevated serum and kidney tissue MDA levels in L-NAME treated rats. Treatment with Cilnidipine reduced serum and kidney tissue MDA levels in Group 4 rats as compared to Group 3 rats. (LConclusion: The results demonstrate that cilnidipine has suppressive effects against progressive renal injury as evidenced by decrease oxidative stress indicator MDA levels in NO deficient hypertensive rats. This effect is explained by the L/N type calcium channel inhibition of Cilnidipine, the L-type calcium channel blocking action lowers blood pressure and N-type calcium channel blocking action leads to suppression of the sympathetic nerve activity and renin-angiotensin aldosterone system without changing the settings for cookies results in saving them in your device . You can change cookies' settings any time you want in your web browser. More details in our Cookies Policy

Got it!

**Keywords**

Nitric Oxide Deficient Hypertension (/article/search?keywords=Nitric Oxide Deficient Hypertension), Oxidative Stress (/article/search?keywords=Oxidative Stress), Mean Arterial Pressure (/article/search?keywords=Mean Arterial Pressure), Malondialdehyde (/article/search?keywords=Malondialdehyde)

**Links**

 Fulltext (/api/file/viewByFileId/1024514.pdf)

EN

**Reference**

No data  
Main page (<http://jml.indexcopernicus.com>)

© **Index Copernicus 2017**

Articles quoting

No data  
**INDEX**

**COPERNICUS****I N T E R N A T I O N A L**

(<http://indexcopernicus.com>)

As part of our website we use cookies to provide you with services at the highest level , including in a manner tailored to individual needs . Using the site without changing the settings for cookies results in saving them in your device . You can change cookies' settings any time you want in your web browser. More details in our Cookies Policy

Got it!