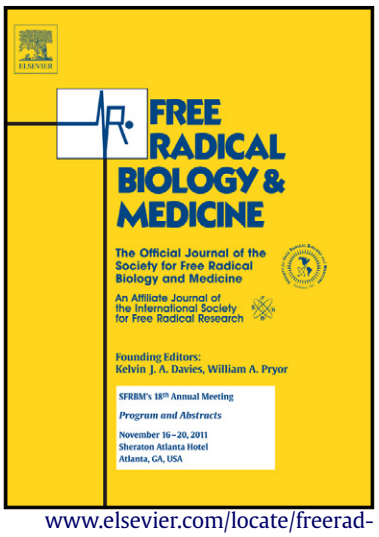

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Prenatal Lipopolysaccharide Exposure Causes Mesenteric Vascular Dysfunction Through NO-cGMP Pathway in Offspring

Xinquan Wang*[1,2], Jialiang Wang*[1,2], Hao Luo[1,2], Caiyu Chen[1,2], Fang Pei[1,2], Yue Cai[1,2], Xiaoli Yang[1,2], Na Wang[1,2], Jinjuan Fu[1,2],Zaichen Xu, Lin Zhou[1,2#], Chunyu Zeng[1,2#]

[1]Department of Cardiology, Daping Hospital, The Third Military Medical University, P. R. China;

[2]Chongqing Institute of Cardiology, Chongqing, P. R. China.

*Co-first authors

[#]Corresponding authors

Address correspondence to:

Chunyu Zeng, MD, PhD; Lin Zhou, MD, PhD.

Department of Cardiology, Daping Hospital.

The Third Military Medical University.

No.10, Changjiangzhilu Road, Yu Zhong District, Chongqing 400042, P. R. China.

Tel:(+86)236875808; Fax: (+86)236875808.

Email: cyzeng01@163.com; linzhou65@hotmail.com.

Abstract

Cardiovascular diseases, such as hypertension, could be programmed in fetal life. Prenatal lipopolysaccharide (LPS) exposure *in utero* results in increased blood pressure in offspring, but the vascular mechanisms involved are unclear. Pregnant Sprague–Dawley (SD) rats were intraperitoneally injected with LPS (0.79 mg/kg) or saline (0.5 ml) on gestation day 8, 10, and 12. The offspring of LPS-treated dams had higher blood pressure and decreased acetylcholine (ACh)-induced relaxation and increased phenylephrine (PE)-induced contraction in endothelium-intact mesenteric