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Erratum
Nox2 contributes to cardiac fibrosis in diabetic cardiomyopathy in a transforming growth factor-β dependent manner: Int J Clin Exp Pathol. 2015; 8(9): 10908-14

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Abstract: Purpose: This study aimed to investigate the effect of Nox2 on cardiac fibrosis and to elucidate the regulatory mechanism of Nox2 in the development of DCM. Methods: We established normal and insulin-resistant cellular model using neonatal rat cardiac fibroblasts. Then Nox2-specific siRNA were transfected into cardiac fibroblasts with Lipofectamine ® 2000 and crambled siRNA sequence was considered as control. Meanwhile, a part of cells were randomly selected to be treated with or without transforming growth factor-β (TGF-β). Moreover, quantitative real-time polymerase chain reaction (qRT-PCR) and Western blot were respectively performed to determine the expression level of related molecules, such as Nox2, collagen type I and III (COL I and III) and PI3K/AKT and PKC/Rho signaling pathway-related proteins. Results: TGF-β stimulation significantly increased the expression level of Nox2 both in mRNA and protein levels. Suppression of the Nox2 markedly decreased the expression of COL I and COL III in normal and insulin-resistant cellular model with TGF-β stimulation. Moreover, suppression of the Nox2 significantly decreased the expression of PI3K/AKT and PKC/Rho signaling pathway-related proteins in insulin-resistant cellular model with TGF-β stimulation. However, suppression of Nox2 had no effects on these proteins without TGF-β stimulation. Conclusions: Our finding reveals that Nox2 may promote synthesis of COL I and III via involved in PI3K/AKT and PKC/Rho signaling pathway in a TGF-β dependent manner and consequently promote cardiac fibrosis in the development of DCM.

Keywords: Diabetic cardiomyopathy, Nox 2, cardiac fibrosis, transforming growth factor-β

When the above paper was published in the journal, authors' order and institutions was incorrectly listed on the title page of the paper.

That is Yuqin Liu[1*], Jinhua Zhang[2*] should be Jinhua Zhang[1*], Yuqin Liu[2*].

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