

Abstract

Since 1987 when the ability of cells was discovered to produce endogenous NO and its role in vascular vasodilatation was found, NO became to be the subject of examination by many scientists. NO is the important signaling molecule for now occurring in all important organ systems. This work is focused on its functionality in cardiac tissue under hypoxic stimulus. Effect of nitric oxide has been recently considered as cardioprotective, in spite of its known and well documented harmful influence. Most of the cytotoxic effects can be explained by peroxynitrit, which originates in the spontaneous reaction of NO with superoxid. The aim of this work is to summarize the most important effects of nitric oxide in the heart.