Conclusions The spleenic $CD4^+CD25^+$treg and serum concentration of TGF-β1, IL-10 of mice were decreased and there were lower frequency of $Foxp3^+$ and $CD25^+$ cells in severe atherosclerotic plaques than in mild. It meant that $CD4^+CD25^+$treg may has anti-atherosclerotic role on atherosclerotic progression.

e0220 THE INVOLVEMENT OF IL-23/TH17 PATHWAY IN MURIN MODEL OF COXSACKIE VIRUS B3-INDUCED VIRAL MYOCARDITIS

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Fan Yang, Weifeng Wu, Yuluan Yan, Qing Kong, Yu Pang. *Department of Cardiology, The First Affiliated Hospital of Guangxi Medical University, Nanning, China*

Background The IL-23/Th17 pathway plays an important role in the development of chronic inflammatory diseases and autoimmune diseases. However, the role of the IL-23/Th17 axis in the regulation of virus myocarditis (VMC) is still largely unknown.
Methods VMC was induced in male Balb/c mice by CVB3 peritoneal injection. Mice injected with PBS were taken as the controls. IL-23, IL-17 and RORγt mRNA in the myocardium of VMC were assessed by semi-quantitative RT-PCR on the time of 0, 1, 2, 3, 4 and 6 weeks after injection. IL-23, IL-17 protein from blood plasma was evaluated by ELISA. Flow cytometric analysis was used to evaluate the frequencies of Th17 subsets in $CD4^+$Tcell. CD4+ T cells were isolated from VMC mice and cultured with rIL-23 in vitro to investigate the function of IL-23 in the IL-23/Th-17 pathway.
Results Comparing with the controls, IL-23, IL-17 and RORγt mRNA were steadily expressed in the myocardium of infected mice from 1 week after virus injection ($p<0.01$), IL-23 and IL17 protein level increased from 1st week to 6th week. The frequencies of Th17 cells were obviously increased in VMC mice 1 week after infection ($p<0.01$), the maximum level of Th17 cells was reached at 4th week. The ratio of Th17 cells in the spleen lymphocyte significantly improved after rIL-23 stimulation, the IL-17 and RORγt mRNA expression of the cultured cells and the IL-17 protein in the culture supernatants increased after rIL-23 stimulation ($p<0.05$).
Conclusions IL-23/Th-17 pathway may play an essential role in VMC.

e0221 EFFECTS OF EXTRACORPOREAL CARDIAC SHOCK WAVE THERAPY ON EXPRESSION OF ENDOTHELIAL NITRIC OXIDE SYNTHASE AND BASIC FIBROBLAST GROWTH FACTOR IN SWINE WITH ACUTE MYOCARDIAL INFARCTION

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[1]Shuai Sun, [2]Tao Guo. *[1]Department of Cardiology, First People's Hospital of Yunnan Province, Kunming, Yunnan, China; [2]Department of Cardiology, First Affiliated Hospital of Kunming Medical College, Kunming, Yunnan, China*

Objective To observe the effects of extracorporeal cardiac shock wave therapy (CSWT) on cintent of endothelial nitric oxide synthase (eNOS) and basic fibroblast growth factor (bFGF) in serum and myocardial tissue in swine with acute myocardial infarction (AMI).
Methods 12 Model swines with acute myocardial infarction was made, and were randomly divided into two groups with six in each group: simplex myocardial infarction as the control group and the experimental group which received CSWT treatment. (three times on the first, third, fifth days after operation. 200 hit/point. Total: 12 points. Energy: 0.09 mJ/mm^2). Peripheral blood was extracted at eight different time points before and after operation (immediate, the first, third, fifth days, 1, 2, 3, 4 weeks after operation) to detect serum eNOS content with enzymelinked immunosorbent assay. Materials at myocardial tissue from the swines killed 1 month later were obtained to detect expression amount of eNOS and bFGF with semi quantitative RT-PCR method.
Results eNOS rose up in the experimental group 1 day after CSWT and a reached the peak on the fifth day, whereas eNOS gradully reduced in the control group, which slowed significant difference between the two groups ($p<0.01$). Detection with semi quantities RT-PCR of myocardial tissues of infarction border area showed that eNOS and bFGF expression in the experimental group were obviously higher than those in the control group ((eNOS 27.705±4.13) vs (16.448±3.21) (bFGF 32.571±4.23) vs (17.858±4.17 $p<0.01$)).
Conclusions Extracorporeal cardiac shock wave therapy of acute myocardial infarction can effectively promote rise of eNOS and bFGF, which may be a new way to cure AMI.

e0222 EFFECTS AND FUNCTION MECHANISM OF HYDROGEN SULFIDE ON MYOCARDIAL ISCHAEMIA REPERFUSION ARRHYTHMIA IN RATS

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[1]Chen Xiehui, [1]Li Peng, [1]Huang Xiaoping, [2]Wang Dongming, [2]Chen Songming, [1]Yang Zeming, [1]Chen Zhifan, [1]Xu Wenmin, [1]Chen Liping. *[1]The 2nd People's Hospital of Futian District, Shenzhen, Guangdong, China; [2]The First Affiliated Hospital of Shantou University Medical College, Shantou, Guangdong, China*

Objective To explore the Effects and Function Mechanism of hydrogen sulfide on Myocardial Ischaemia reperfusion Arrhythmia in Rats.
Methods We used sodium hydrosulfide (NaHS) as the donor of H_2S, SD rats were randomly divided into sham group, Myocardial Ischaemia reperfusion group (IR group), IR+NaHS group, and IR+NaHS+glibenclamide group. We monitor the Haemodynamics of rats, including heart rate, arterial pressure, left ventricular pressure *et al*. We also observe the rate of ventrical arrhythmia in each group.
Result H_2S can significantly reduces rats' heart rate, arterial pressure and left ventricular pressure. It also reduces the rate of ventrical arrhythmia in Myocardial Ischaemia reperfusion Rats. The K_{ATP} Channel Blocker glibenclamide can weaken the H_2S' Antiarrhythmic effects ($p<0.01$).
Conclusions H_2S can reduces the rate of ventrical arrhythmia in Myocardial Ischaemia reperfusion Rats. The Function Mechanism may be associated with the K_{ATP} signal transduction pathway in cells.

e0223 EFFECTS OF NEOTYPE PERITONEAL COOLING ON THE INJURED OF INTESTINAL MUCOUS AFTER CARDIOPULMONARY RESUSCITATION IN RABBITS

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Xuan Dai, Xiao-xing Liao, Chun-Lin Hu, Hong-Yan Wei, Xin Li, Hong Zhan. *Department of Emergency Medicine, The First Affiliated Hospital of Sun Yat-Sen University, Guangzhou, China*

Objective To explore whether the peritoneal cooling after cardiopulmonary resuscitation could improve the injured of intestinal mucous in rabbits.
Methods 36 adult New Zealand rabbits were induced ventricular fibrillation by AC current. After the restore of spontaneous circulation (ROSC), rabbits were randomly divided into three groups according to the way of body temperature controlling, that is nomothermia group (NT), surface cooling group (SC) and peritoneal cooling group (PC). The changing of tympanic temperature and peritoneal temperature were observed after ROSC. The animals were sacrificed by over anaesthesia after ROSC for 12 h, the end ileum was removed and fixed in formalin, the histological injured